VOL. 79 ... NO. 5

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A textile leader, H. K. Hallett, in portrait 62

Program details for next month's S.T.A. convention 118

textile bulletin

MAY • 1953

Sectional INDEX

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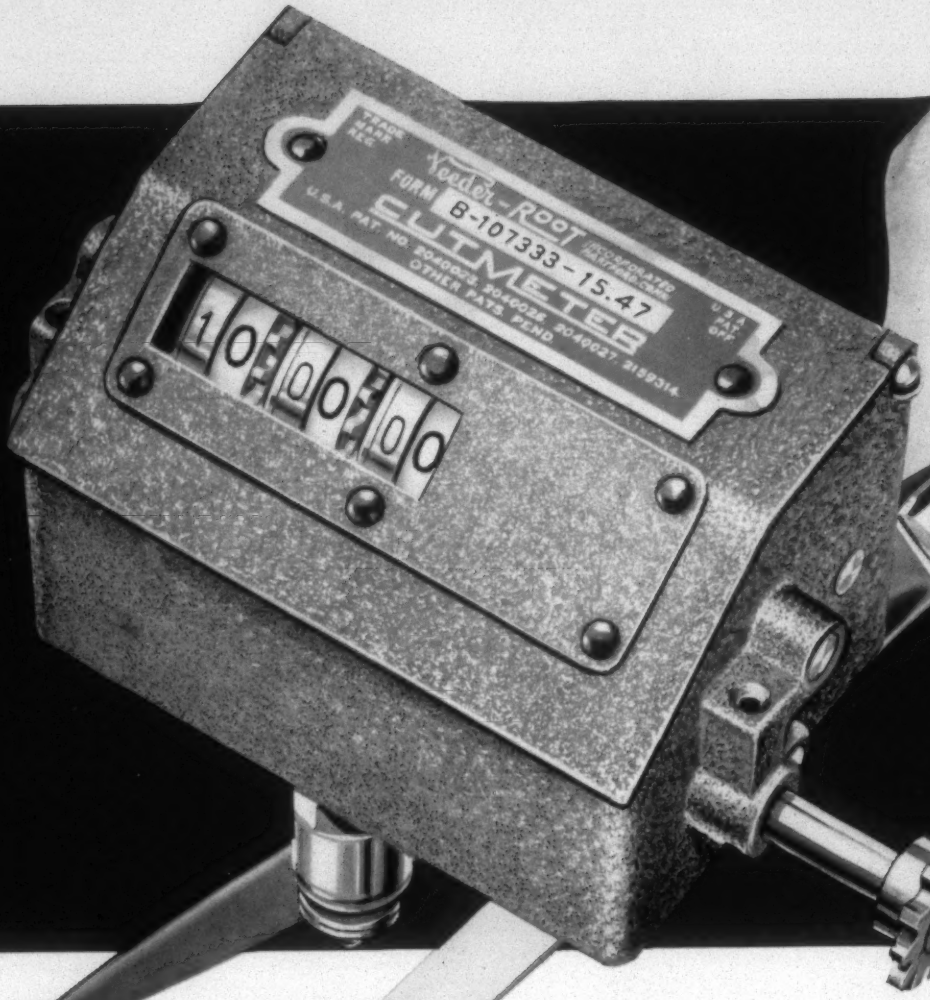
Get CUT-UNIFORMITY...



with

CUT METERS

on Your Looms

Whether your first concern is to cut down on seconds . . . to satisfy a hard-to-please market . . . or to step up the efficiency of a subsequent handling or finishing operation . . . *you've got to get uniform cuts of cloth from your looms.*

The simplest, most effective answers to this need are Veeder-Root Cut Meters, because they're easy to operate . . . can be made to light a light or stop the loom at pre-set woven yardage. Reading is positive and remains until reset by weaver or cut boy. What's more, Veeder-Root Cut Meters are dependable, and have earned the acceptance of leading mills.

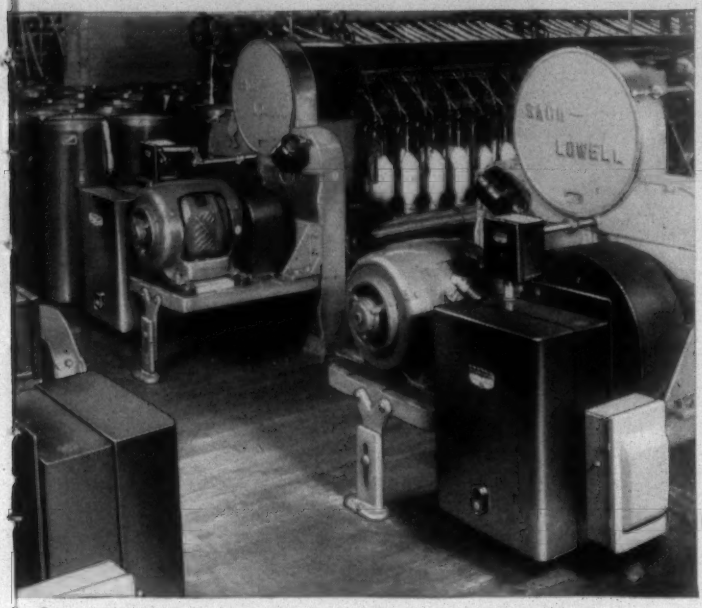
Now, whether your particular uniformity problems are on looms, frames, twisters or preparatory equipment, you can count on *"The Name That Counts"* to give you the help of factory-trained Veeder-Root engineers. Just write the nearest Veeder-Root office.

VEEDER-ROOT
INCORPORATED

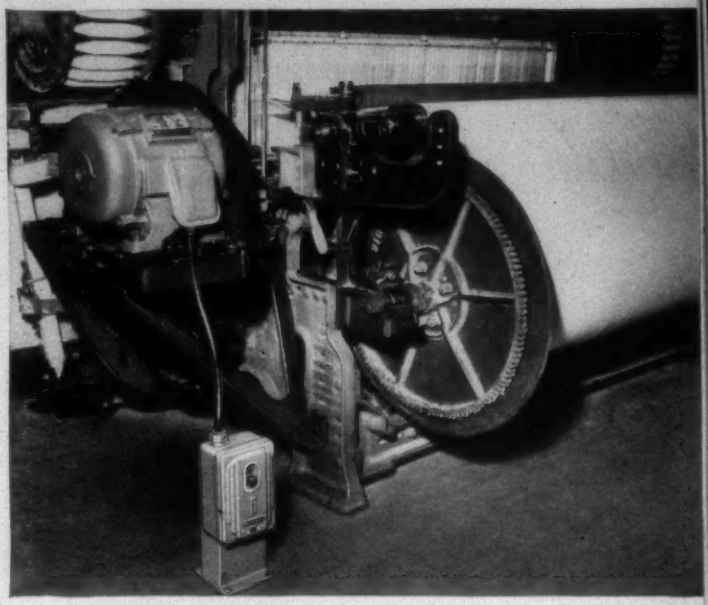
"The Name That Counts"

CUTLER-HAMMER

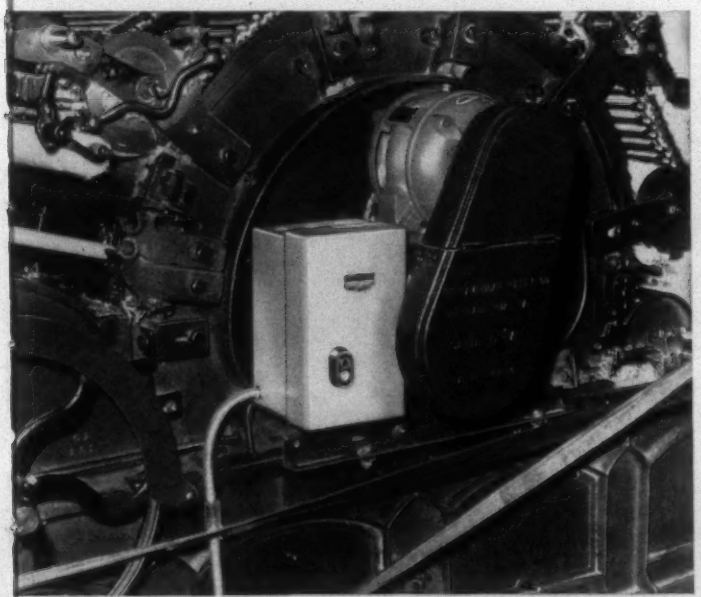
MOTOR CONTROL FOR THE TEXTILE INDUSTRY



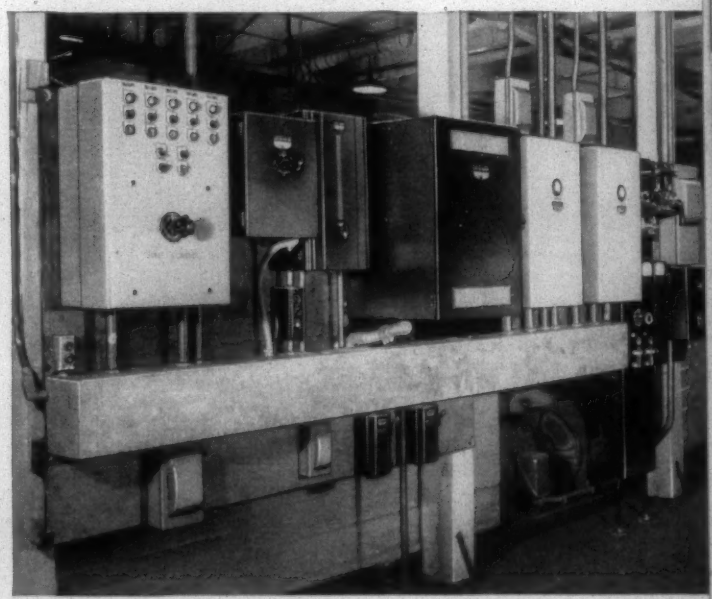
FOR STATESVILLE—Typical installation of Cutler-Hammer Smooth Starters and Shipper Rod Switches. STATESVILLE DIVISION, The Seminole Mills, Statesville, N. C.



C-H LOOM SWITCHES—Typical installation of Cutler-Hammer Loom Switches on unique C-H Welded Pedestals. Leward Cotton Mills, Inc., Worthville, N. C.



C-H CARD CONTROLLERS—Typical installation of extra-safe Cutler-Hammer Card Controllers. Charles H. Bacon Company, Lenoir City, Tenn.



C-H RANGE DRIVE CONTROL—Typical installation. Cutler-Hammer Electronic Dancer Roll Regulator and Range Drive Controller for slack drying range at Mooresville Mills, Mooresville, N. C.

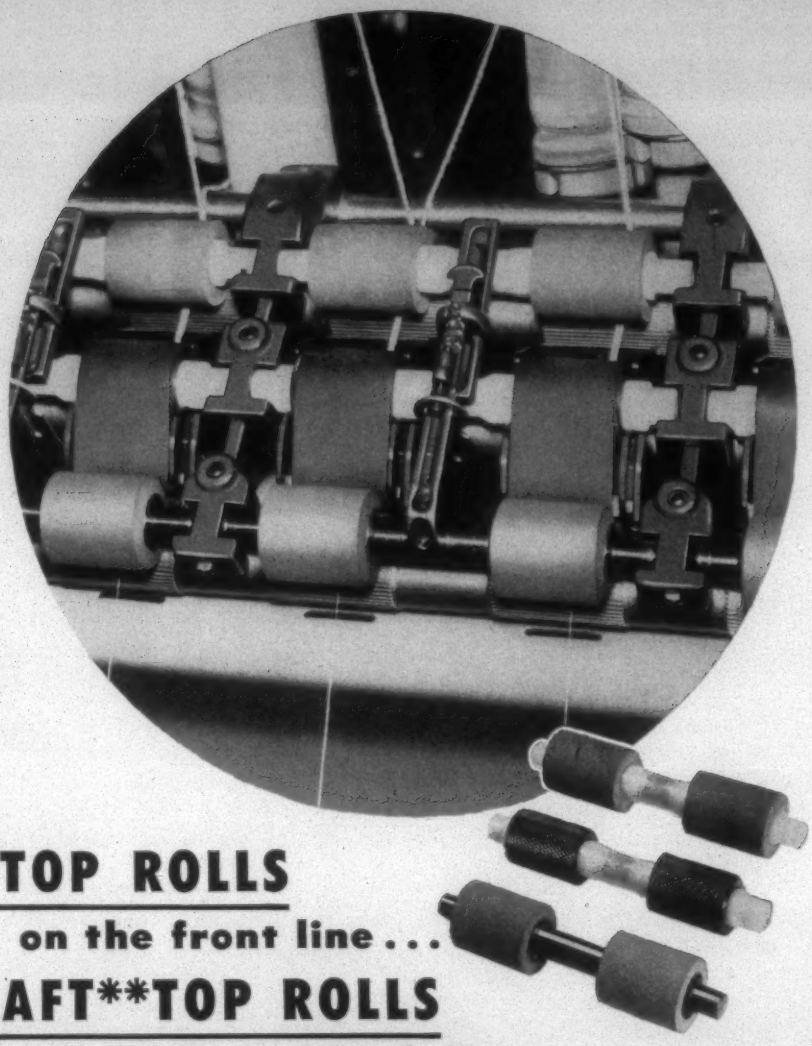
More and more their choice

Men who select and purchase textile mill production equipment can have but one goal in mind. They *must* buy wisely because the production of the mill is a measure of the wisdom of their choice. When it comes to motor control, they buy with extra care. For motor control is pivotal equipment, guiding and guarding motor and machine performance. More and more the choice of these men falls upon Cutler-Hammer Motor Control. For they know from experience that Cutler-Hammer dependability is no mere competitive claim. They know it is the earned advantage of the longest and most intensive specialization in motor control engineering . . . a fact that stands out clearly in a mill's production records to reflect favorably on their own ability and good judgment. They know that Cutler-Hammer can furnish any type of control needed . . . from the simplest starters to the most complex electronic equipment.

You too will find it pays to insist on Cutler-Hammer Motor Control and refuse all substitutes. An adequate network of Authorized Cutler-Hammer Distributors throughout the textile manufacturing areas insures prompt attention and supply. CUTLER-HAMMER, Inc., 1455 St. Paul Avenue, Milwaukee 1, Wisconsin.

CUTLER-HAMMER
MOTOR CONTROL
C-H

a winning combination



WHITIN-CLIMAX*TOP ROLLS

on the front line . . .

WHITIN-CLEANDRAFT**TOP ROLLS

on middle and back lines

With Whitin-Climax Ball Bearing Top Rolls on the front line and Whitin-Cleandraft Non-lubricated Top Rolls on middle and back lines, the ultimate in roll efficiency for spinning has been achieved.

Adopted as standard equipment, where applicable, on all Whitin spinning frames for cotton and staple synthetics, this combination virtually eliminates the necessity for lubricating the top rolls. Oil stained yarn is practically banished. Yarn quality is greatly improved. Roll picking and cleaning costs are reduced to levels never before possible with solid rolls and a new low in maintenance costs is reached.

Already installed in more than 150 mills, this winning combination of top rolls provides advantages and economies which rapidly earn their cost.

*Manufactured by
MACHINECRAFT, INC.
WHITMAN, MASS.

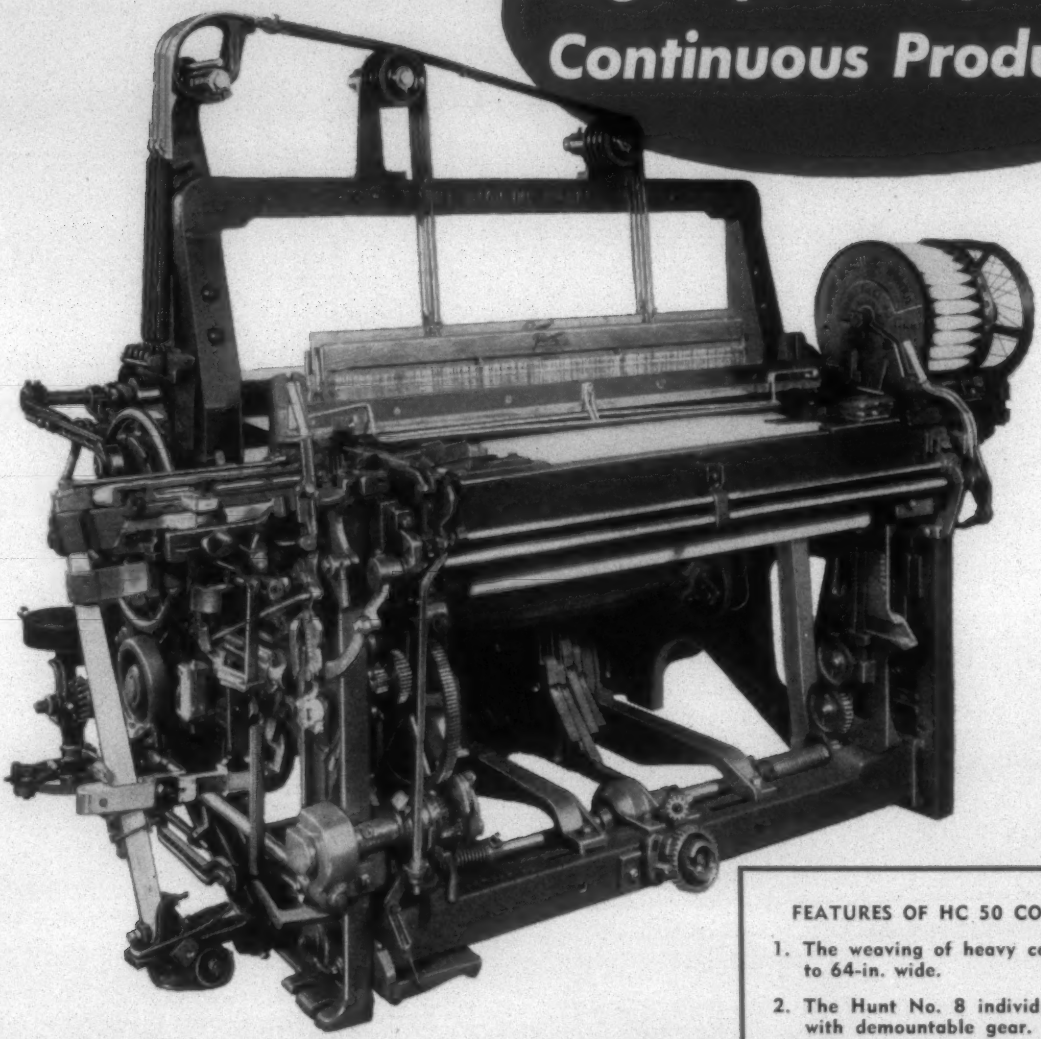
**Manufactured by
INDUSTRIAL PLASTICS, INC.
WHITMAN, MASS.

Whitin MACHINE WORKS

WHITINSVILLE, MASSACHUSETTS
CHARLOTTE, N. C. • ATLANTA, GA • SPARTANBURG, S. C. • DEXTER, ME.

The New HUNT HC 50 Cotton Loom Gives

High Speed Operation Continuous Production

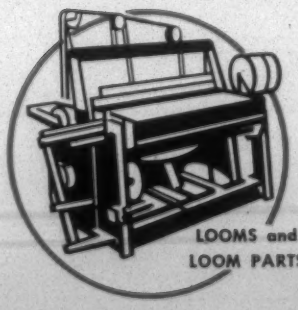


The new HC 50 Cotton Loom will give you faster production with many features that insure trouble-free operation. This new loom has heavy construction in the sides. It is equipped with the improved Hunt Spreader, giving proper alignment with four bearings on the crankshaft and two additional bearings on the camshaft.

FEATURES OF HC 50 COTTON LOOM

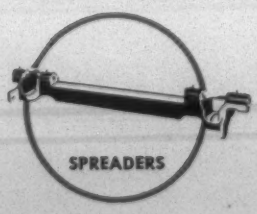
1. The weaving of heavy cotton fabrics up to 64-in. wide.
2. The Hunt No. 8 individual motor drive with demountable gear.
3. Roll and shaft, or Brown spring-top harness motion, or 20-harness dobby.
4. A crankshaft diameter of 1⅝ in. A camshaft diameter of 1 15/16 in.
5. Single, double or center fork filling motion.

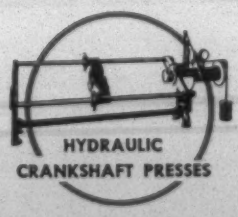
Write now for descriptive folder and further details.

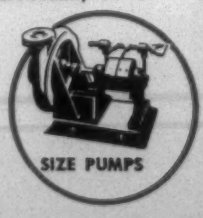


HUNT LOOM & MACHINE WORKS, INC.

**200 ACADEMY ST.
GREENVILLE, S. C.**



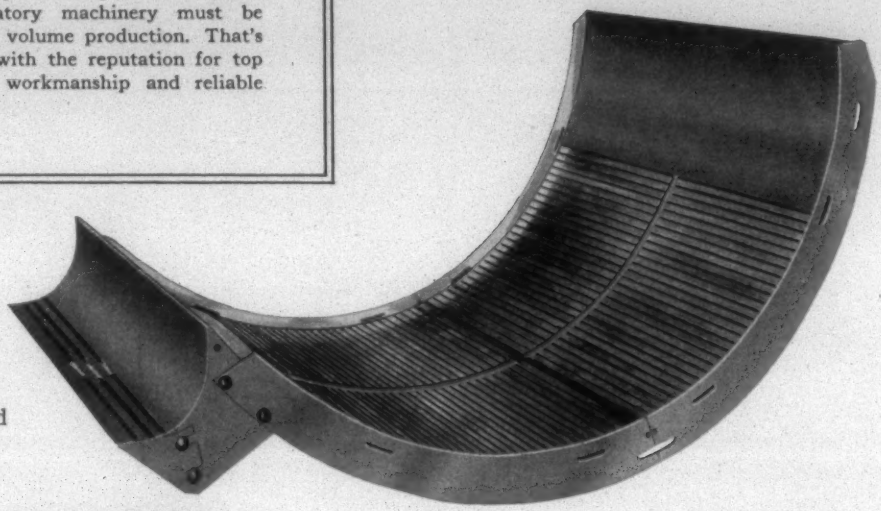




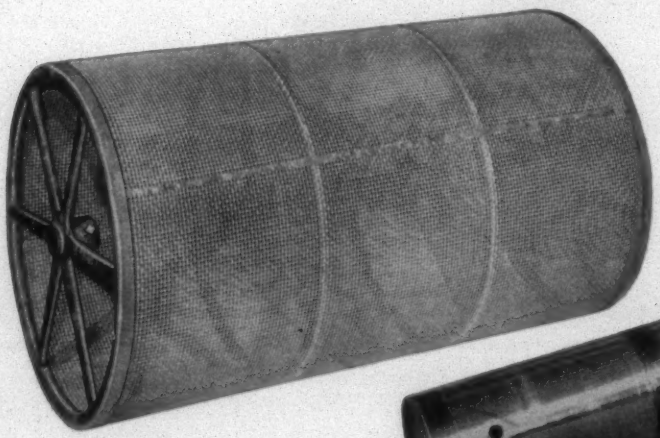
MORE PRODUCTION AT LOWER COSTS with GASTONIA TEXTILE SHEET METAL PARTS

The quality and the profit of your end product starts at the beginning—where preparatory machinery must be geared for efficient, economical volume production. That's our job—a job for specialists with the reputation for top quality products, painstaking workmanship and reliable service.

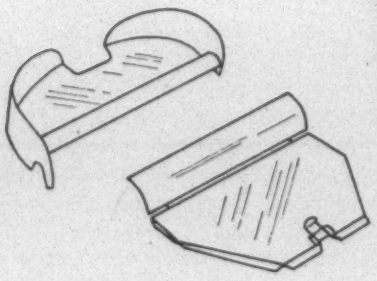
Standard type rib or perforated Card Screens are precision built on special jigs. Every screen is inspected and double checked for accuracy and tolerance.

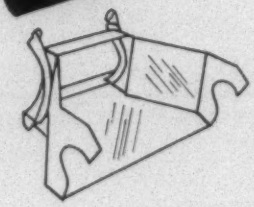


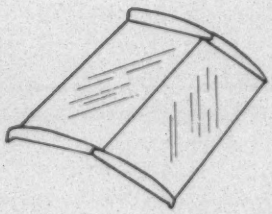
Picker, Condenser and Waste Machine Screens of maximum strength and durability are constructed of the best materials available.

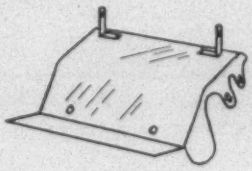


New and rebuilt Cylinders are dynamically balanced to reduce vibration to an absolute minimum.









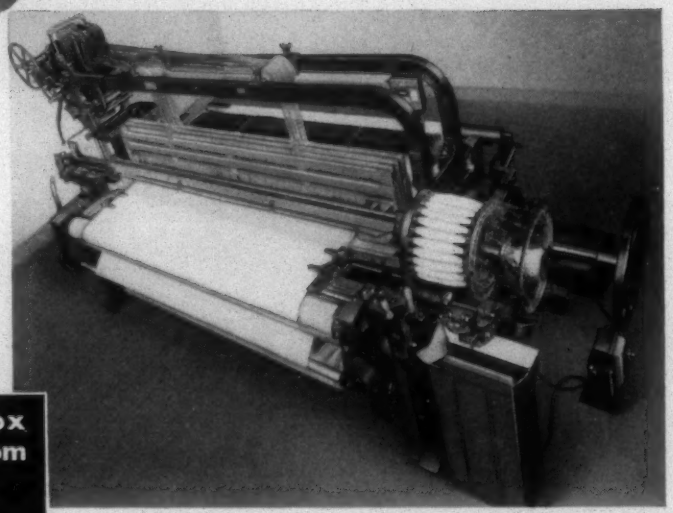
Years of practical experience —the finest of raw materials —and precision machinery in the hands of skilled workmen go into every product.

GASTONIA TEXTILE SHEET METAL WORKS, Inc.
GASTONIA, NORTH CAROLINA
A SHEET METAL WORKS SERVING TEXTILE MILLS

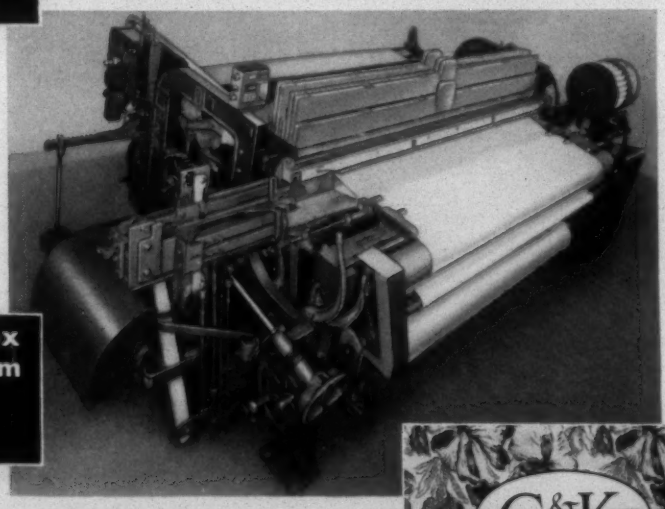
FIRST IN FILLING MIXING LOOMS

For many years, C&K has built multi-purpose Filling Mixing Looms with the Call Box feature. Now, out of this long experience, come these latest-design, *single-purpose* Filling Mixing Looms . . . to give you greatest return in saleable cloth per dollar of your loom investment.

But whether you need multi-purpose or single-purpose Filling Mixing Looms, the *first* thing to do is to set your sights by standards of *proven performance*. See C&K today!



New C&K 2x1 Box Filling Mixing Loom
equipped with
rotary magazine . . . and
HEAD MOTION



New C&K 2x1 Box Filling Mixing Loom
equipped with
rotary magazine . . . and
END CAM

Crompton & Knowles LOOM WORKS

WORCESTER 1, MASSACHUSETTS, U. S. A.

Philadelphia, Pa. • Charlotte, N. C. • Allentown, Pa. • Crompton & Knowles Jacquard & Supply Co., Pawtucket, R. I.

This "Invisible Trademark" Stands Back of the Trademarks of the World's Finest Woven Fabrics

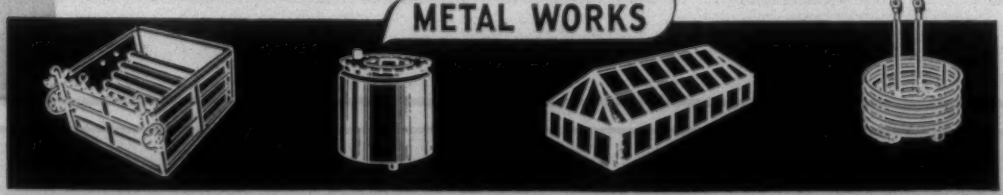
Custom Tailors . . . of METALS for INDUSTRY!

The fabrication of machinery and equipment for Southern Industries has been a Sims Specialty for over twenty years. Today, the demand for equipment of this type find Sims' engineers and craftsmen able to produce this equipment, custom tailored to the job . . . built to fit the requirements of physical space and local conditions.

A competent field engineer will be glad to show you how to reduce costs materially—write or wire SIMS today!

We also do Stainless Steel or alloy fabrication. Write for "Stainless Steel Fabrication"—the complete story of custom tailoring by SIMS.

FABRICATORS SINCE 1928 **Sims METAL WORKS** WEST POINT GEORGIA



Midas touch
for cottons and rayons

National
CARBANTHRENE GOLDEN YELLOW RK

DOUBLE PASTE

Yielding golden-yellow shades on cotton or rayons, this new National anthraquinone vat dye possesses good fastness to boiling soap or soda, cross dyeing, acids, alkalis and light and excellent fastness to washing, perspiration, mercerizing and chlorine. It is especially suitable for coloring ginghams, chambrays, broadcloth and other dress materials, as well as upholstery materials.

National Carbanthrene Golden Yellow RK disperses readily in water and can be applied in all types of machines either by the reduced bath method or by the various methods starting with pigment-padding.

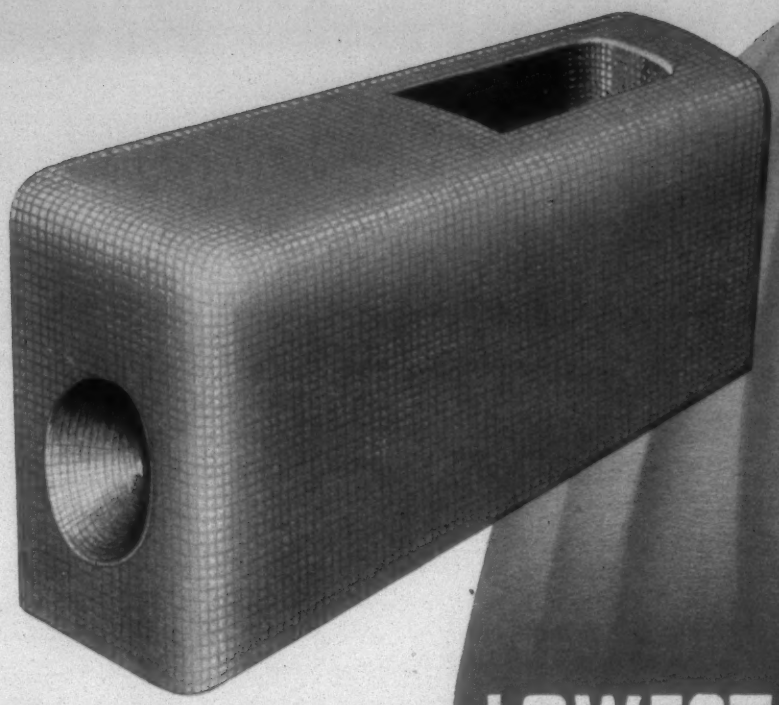
Samples and Application Data may be had by phoning or writing our nearest office.

A New National Vat

NATIONAL ANILINE DIVISION
ALLIED CHEMICAL & DYE CORPORATION
40 RECTOR STREET, NEW YORK 6, N.Y.

Boston Providence Philadelphia Chicago San Francisco
Portland, Ore. Greensboro Charlotte Richmond Atlanta
Columbus, Ga. New Orleans Chattanooga Toronto

This Picker STANDS OUT Because



It Gives . . . LOWEST COST PER LOOM PER YEAR

Outstanding weavers and loom fixers have written the specifications for Denman Pickers. Their assistance has made possible a combination of the best running qualities for good weaving with maximum loom economy.

Terrell field men are trained to analyze the job and recommend the proper picker for it. This is part of the service that goes with every Denman installation.

This combination assures you the best performance from today's best picker—Denman Pioneer.

MADE BY

DENMAN TIRE & RUBBER CO.

Exclusive Sales Representative

THE TERRELL MACHINE COMPANY, Inc.

CHARLOTTE, NORTH CAROLINA

"Tailored" Pickers and Help Many Mills

By Varying the Density at Vital Points, the Dayton Thorobred Drop Box Picker Safely Absorbs All Strains and Stresses of Impact

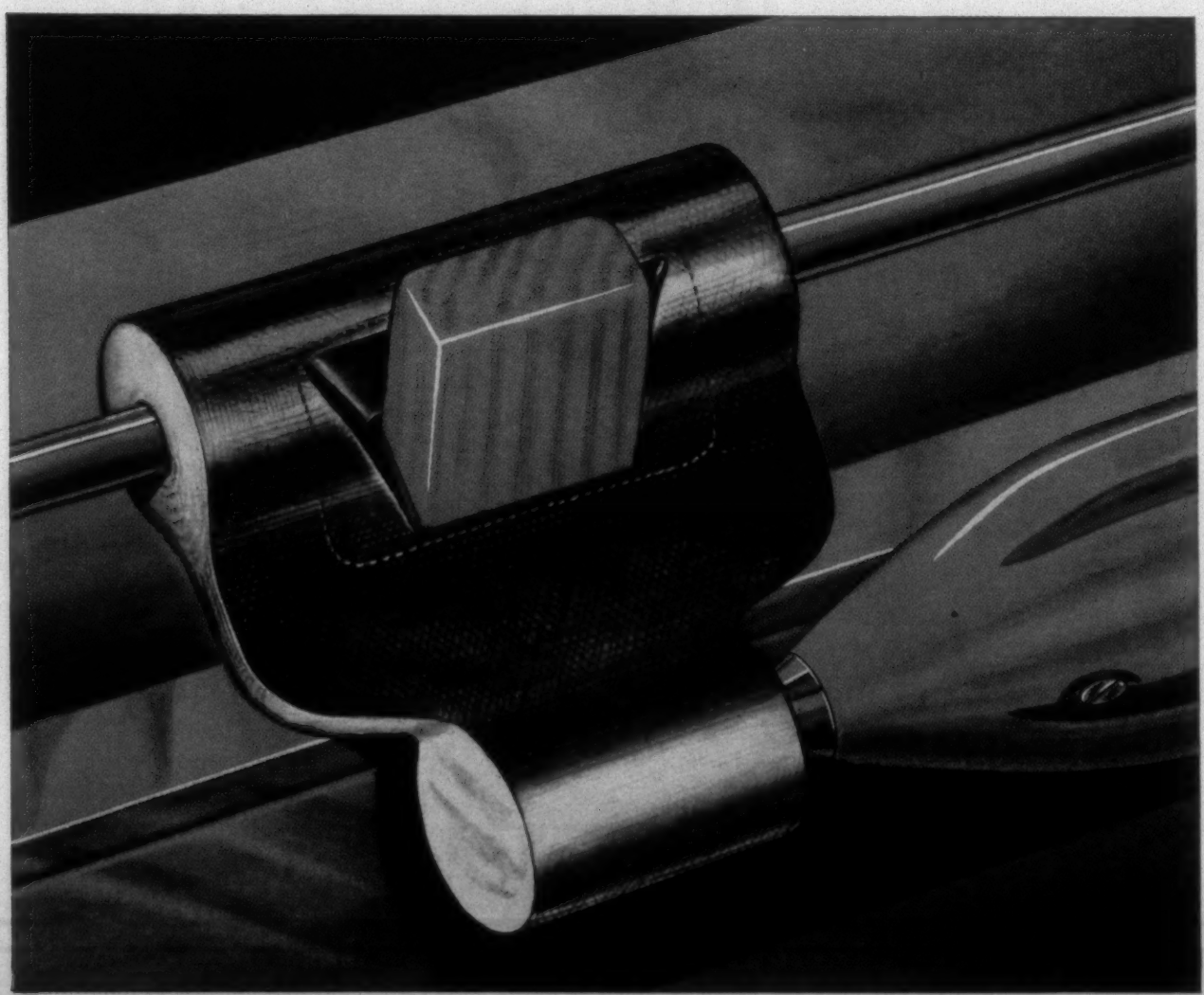
There's a good reason why Dayton Thorobred Drop Box Pickers perform so satisfactorily on today's high speed looms—they are "tailor-made."

For instance, at the shuttle contact point, the exact density or softness easily absorbs the shocks of shuttle receiving. It also eliminates shuttle point loosening and helps assure a perfect throw throughout life of picker.

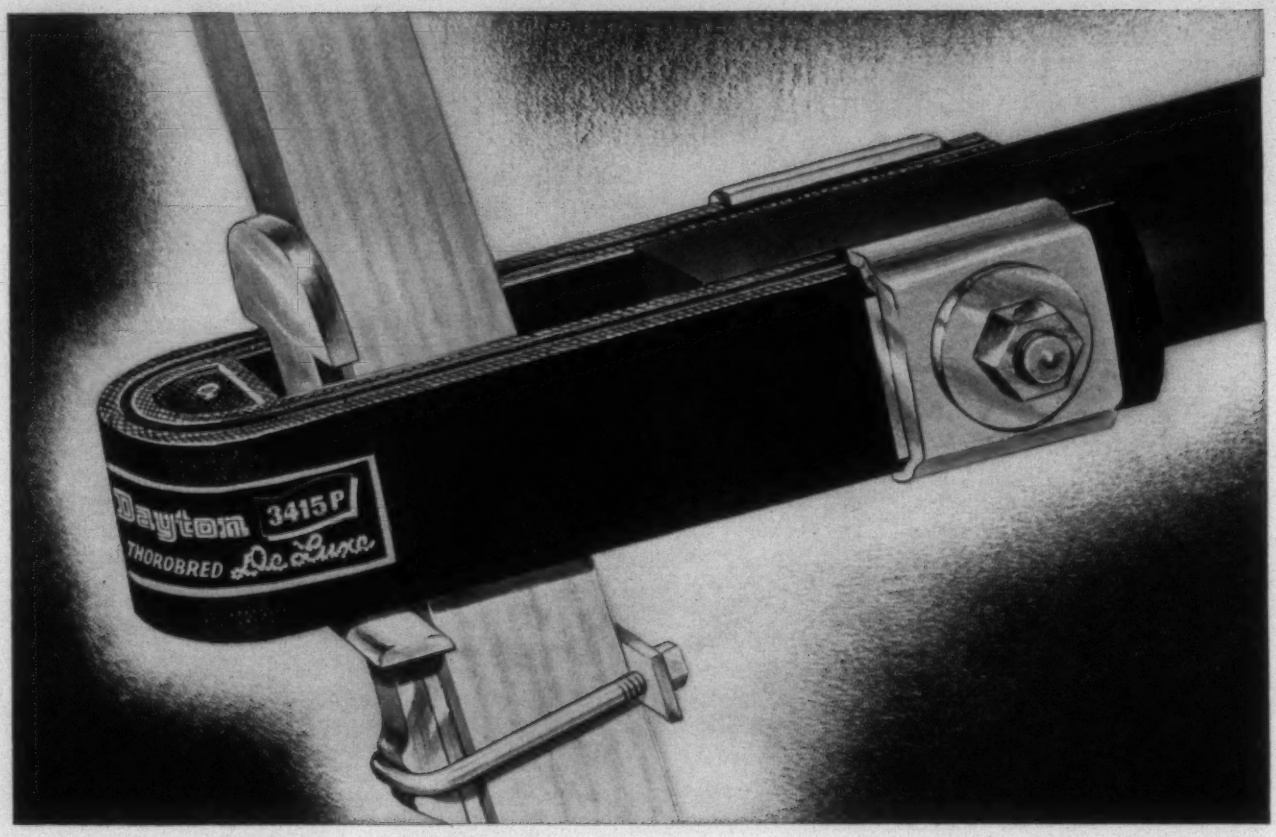
Then, *at the picker stick contact point,* just the right amount of cushion has been provided to absorb the terrific impacts. This results in less wear on the stick and longer life for the picker.

And, at the spindle hole, to minimize wear a hard composition bearing surface is built into the picker. This requires no lubrication and will not wear egg shaped.

This density control at these vital points is molded into a one-piece picker. The result is more efficient loom operation and lower picker costs. Ask your loom supply jobber for further information on Dayton Drop Box Pickers, or write Dayton Rubber direct.



Lug Straps Reduce Weaving Costs



Extra Strength Built Into Dayton Thorobred Lug Straps Assures Long, Trouble-Free Service at Low Cost

Mills that equip their looms with Dayton Thorobred Lug Straps enjoy low replacement costs. There are several reasons for this.

In the first place, Daytons are built all in one piece—no rivets or parts to work loose. Another thing, Daytons have exactly the right amount of cushion built right into the lug. This cushion means not only the ability to "give" under impact, but also the ability to "come back" immediately. This saves wear and tear on the loom, and enables the strap to give longer service.

Another important advantage of Dayton Lug Straps is their extra strength. This is obtained chiefly from a special longitudinal cord, right in the center of the lug, which provides the desired extra strength along the line of force.

As a result of their sound engineering design, Dayton Thorobred Lug Straps are leaders in their field for efficient service at the lowest possible over-all cost. Ask your loom supply jobber for further details, or better still, try some now on your own looms. You'll soon be convinced.

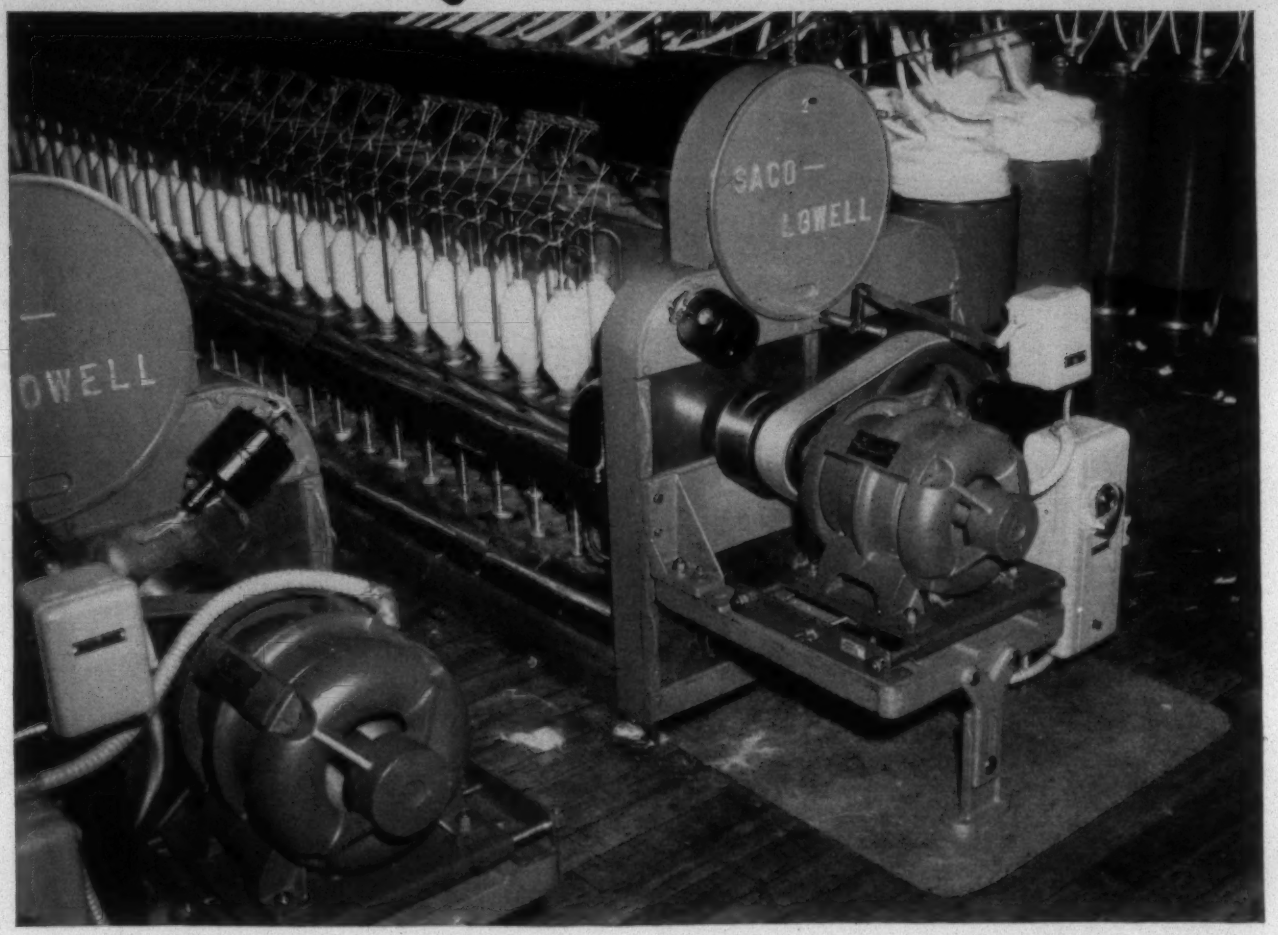
Dayton Rubber

Since 1905

TEXTILE PRODUCTS FOR BETTER SPINNING AND WEAVING

Dayton Rubber Co., Textile Division, Woodside Bldg., Greenville, S. C.

Rhoads Engineered ROVING FRAME DRIVES



Smooth Start-up Eliminates Broken Ends, Increases Production of Roving Frames!

This short center drive with its Tannate Flat Leather Belt, automatic spring-tension motor base and Bethlehem slip ring starter maintains constant machine speeds, as well as eliminates broken ends, causing lost production. One of 24 now running, it was designed and engineered by J. E. Rhoads & Sons for a prominent New England textile mill. In the two years since this drive was first installed, it has more than proved its ability to produce top quality yarn economically.

Rhoads Engineering Service . . . You too, can take advantage of Rhoads Engineering Service when you are planning new drives or changing old ones. Rhoads Engineers are specialists in the field of mechanical power transmission.

Tannate . . . Your Best Buy in Belting . . . Whether your machines are driven from individual motors or from a line shaft . . . on short centers or long, Tannate will help you obtain more production. Its glove-like grip insures smooth, positive power transmission from motor to machine. In addition, Tannate has the flexibility, the strength, the resilience to withstand the constant flexing and twisting of quarter-turn drives and cross belts. Tannate is unaffected by high humidity, actually costs less to run and maintain.

Specify Tannate Flat Leather Belting . . . today's *best buy* in power transmission belting. Consult Rhoads Engineering Service. *Write:*

J. E. RHOADS & SONS
35 North Sixth Street, Philadelphia 6, Pa.

RHOADS
INDUSTRIAL LEATHERS

ATLANTA • PHILADELPHIA • NEW YORK • CHICAGO

Rayon Reports

Prepared Monthly by American Viscose Corporation, New York, N. Y. — May, 1953

Study reconfirms launderability of rayon shirts of vat-dyed fabrics stabilized with Avcoset

Twenty consecutive launderings of white, cream, and yellow spun rayon shirts that had been treated with the Avcoset process, have clearly proved their commercial launderability.

This was the finding of a study conducted on 36 shirts at the College of Household Arts and Sciences, Texas State College for Women. The study was made under a Textile Research Fellowship sponsored by American Viscose Corporation.

The strength, dimensional change, and color retention values of the shirts were measured after 5, 10, 15, and 20 launderings.

Dry strength changes in the warp direction ranged from 7.5 to 26.2 per cent after 20 washings. In the filling direction changes ranged from 6.8 to 22.7 per cent. No rupturing nor visible damage occurred during the washings.

Dimensional changes, by Commercial Standard CS59-44, showed no positive or negative change greater than 1 per cent. Higher shrinkages noted in the seams were attributed to the thread used and the amount of tension applied during commercial laundry pressing procedure.

After the washings, plus ironings, the number of units of color difference in the cream shirts was 5.87, and in the yellow shirts, 3.50. Whiteness retention was 100 per cent throughout.

Inquiries about the Avcoset process for stabilizing rayon shirting and other fabrics are cordially invited. Complete technical assistance in its application is available from American Viscose textile technicians.

RAYON 20 YEARS AGO

NEW YORK, May, 1933—Makers of rayon blouses and dresses have created a "fifth season" — a late showing on summer apparel.

PHILADELPHIA, May, 1933 — Rayon is claiming a big share of the spotlights at the 29th Annual Knitting Arts Exhibition.

PARIS, May, 1933 — "Peau du Diable" (Devil's Skin) is the name of a new wrinkle-finished rayon novelty material popular here.

Attention:

QUALITY CONTROL DEPARTMENT

Are you having yarn variation caused by crooked rolls?

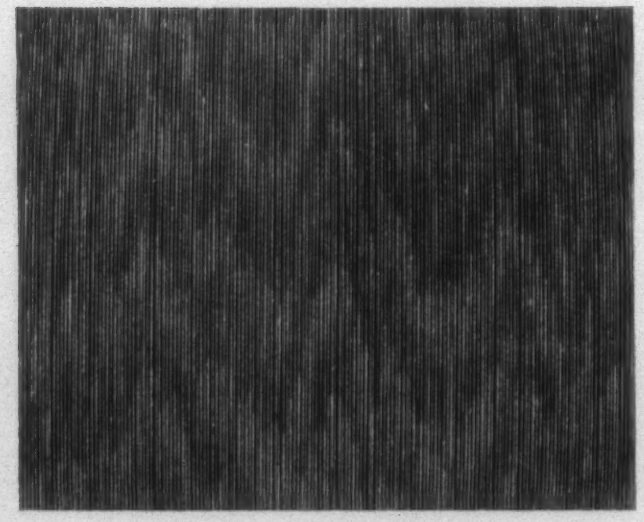
If so, here is the answer

NEW MODERN METHODS OF MANUFACTURING—
CASE HARDENED DRAFTING ROLLS THAT ARE STRAIGHT—
RUNOUT NOT TO EXCEED .003=NO PATTERN IN YARNS—
ALL DIAMETERS HELD TO .0015=CONSTANT NUMBERS

High standards of today require quality yarns. Quality yarns require precision drafting rolls. With over 500 frames of N/Y rolls in operation, mills report up to 40% less variation.

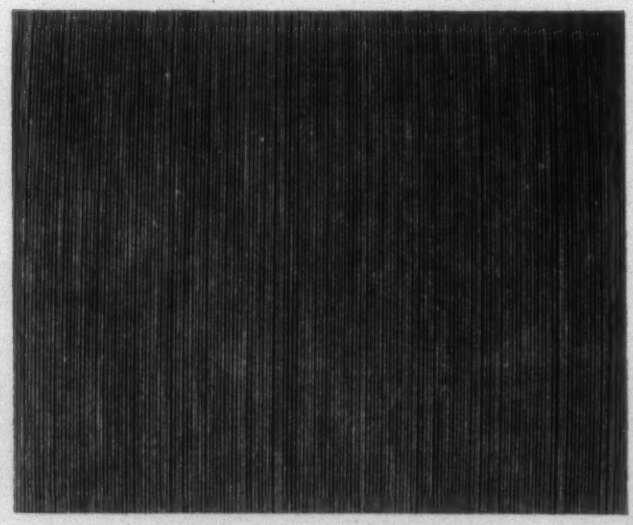
SOUNDS FANTASTIC—
HERE IS THE PROOF!

CROOKED ROLL PATTERN



Order a frame and make your own test.
You will be amazed at the difference.

WITH N/Y ROLLS—NO PATTERN



ROLLS FOR—Spinning-Flyer Frames—
Combers—Drawing and Lap Machines.

NORLANDER-YOUNG MACHINE CO.

York Road GASTONIA, N. C. Telephone 8556

THE SYMBOL OF N Y QUALITY AND SERVICE

Now—you can pick the best for your specific needs

PRYM A

is applied to viscose and acetate rayons, and blends of Nylon, Orlon and Dacron fibers to provide extremely durable stabilization and crease resistance. Ideal for durable embossing and schreinering of 100% acetate fabrics. Prym A is **chlorine resistant** on viscose rayons.

PRYM S

gives much softer hand than Prym A — is used on viscose and acetate rayons, and blends of Nylon, Orlon and Dacron fibers. Extremely durable stabilization, and crush resistance.

PRYM® RESINS

PRYM DS

is applied to cotton, rayon and blends for a) durable stabilization, b) crush resistance, c) mechanical finishes. Gives a firmer hand than Prym S in durable mechanical finishes.

PRYM CR

gives stabilization and crush resistance to cottons. **chlorine resistant** — no yellowing of whites!

PRYM N

is applied to Nylon, acetate, cotton and viscose rayons. Durable Nylon stiffening (shoe cloth, ribbons, taffeta, etc.). Permits exceptionally durable mechanical finishes on cotton and rayon.

without refrigeration regardless of temperature changes!

the new series of resins that give mechanical finishes, superior crush resistance, shrinkage control, plus greater durability than ever—at lower costs!

Prym finishes are liquid, completely soluble in water. Easy to apply with standard procedures. Most economical, most efficient of the thermosetting resins. For technical data, samples or consultation, write, wire or phone

WARWICK CHEMICAL COMPANY, DIVISION

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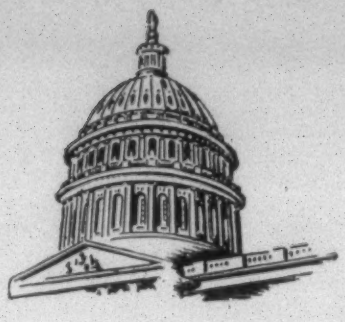

WATCHING WASHINGTON

[Exclusive and Timely News from the Nation's Capital]

Mr. Eisenhower does not expect to perfect the fundamental program of his Administration during the first year. Readjustment is proving to be greater than he expected. He is having to undo nearly everything, for Truman left a stupendous mess behind. He is confronted with many things he did not expect, and is going to the roots of policy and procedure.

Fiscal problems reach deep into every phase of reorganization, and of readjusting the economy to reduce inflation. The President's proposal to chop $8.5 billion from the Truman budget of $78.6 billion almost wipes out the new deficit of $9.9 billion envisioned in January. However, with an expected decline in income tax revenues, and with a probable cut in income taxes, and loss of the excess profits tax, a balanced budget is not foreseen before 1954.

Governmental reorganization entails scaling down the huge bureaucracy of big government built up by Roosevelt and Truman, and redistributing the residue of essential activities. But many of these things have statutory protection, and revision of laws must be sought from Congress.

The President is moving to hold down foreign aid next year to $5.8 billion, which is a decrease of $1.8 billion from the Truman proposal. Republican leaders are talking of further cuts, while leading Democrats are lined up temporarily behind the President. The cut is not as great as he would like to see, said the President, but is the most he thinks can be safely made.

Under the President's direct supervision, a new grand plan of national defense is being fashioned. It is keyed to a balanced budget, and to a fresh appraisal of Kremlin intentions and capabilities. Some cuts in spending will be heavy, for the President is convinced the present system is encrusted with waste and needless frills.

Prime intent of the new defense plan is to key arms production to the efficiency standards of private industry, and make every dollar count. It will not entail "spreading employment" to please union bosses, or of bringing all of industry under wage and hour legislation.

Defense Secretary Wilson found what is called a fantastic scheme of mobilization, inherited from Truman, calling for $530 billion in arms production alone. The plan would tie up the whole of national industry for more than six years, with almost no civilian production. The President was stunned by its details, and decided on firm civilian control over military management.

Vast stocks of arms and weapons, costing billions, are found to be obsolete, and costing more millions for storage and safekeeping. Orders for arms, placed with inadequately equipped plants when the Korean war started, are yet to be delivered. Other orders delayed in delivery were palpably placed to relieve unemployment in depressed areas, or to set up industry in ambitious cities and villages.

Defense Secretary Wilson is questioning the very fundamentals of defense policies and plans, and junking a large part of the Truman program. The atom

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bomb, and atomic artillery, have key places in the new plan. Outmoded weapons are being scrapped. Truman's whole plan has been found to be unrealistic and not economically feasible.

The 1951 strategy plan of the Joint Chiefs of Staff has been thrown out at the window, along with the Joint Chiefs. New strategy under Wilson's tough "businessmen's management" concept is being charted. Wilson is relying heavily on adequate industrial strength, with the core of offense in powerful atomic bomber jets, capable of delivering long-distance knock-out blows.

New proposed budget for the Defense Department would cut military spending by $2.3 billion, and return 200,000 men in uniform to civil life. Total men in uniform now is 3,315,000. The dollar saving would be taken from Truman's budget of $45.4 billion. House members called it "disappointingly low," and a slash by one-half in the White House "hope" for a cut of $4.2 billion.

Senator Taft said the propsed arms cut of $2.3 billion is not enough, and and the whole subject should be surveyed again. He wants a new survey that will fix the wartime roles of the three branches of service, and decide what weapons are needed and what should be discarded.

Clean-up of the State Department is proving to be the most formidable and difficult problem in reorganization facing the new Administration. Belief prevails in Congress it is loaded down with misfits, New Dealers and Communists who dissipate efforts on extraneous things of no practical value. The department does not appear to have adequate records as to its personnel.

Closer co-operation between state and federal governments on mutual problems is a basic aim in new policy, the President said. In reality, he wants the states to take back many of the functions they have been surrendering to the Federal Government for 20 years. He told the governors in a two-day conference he is "deadly serious" in finding a "logical" division between federal and state functions and responsibilities.

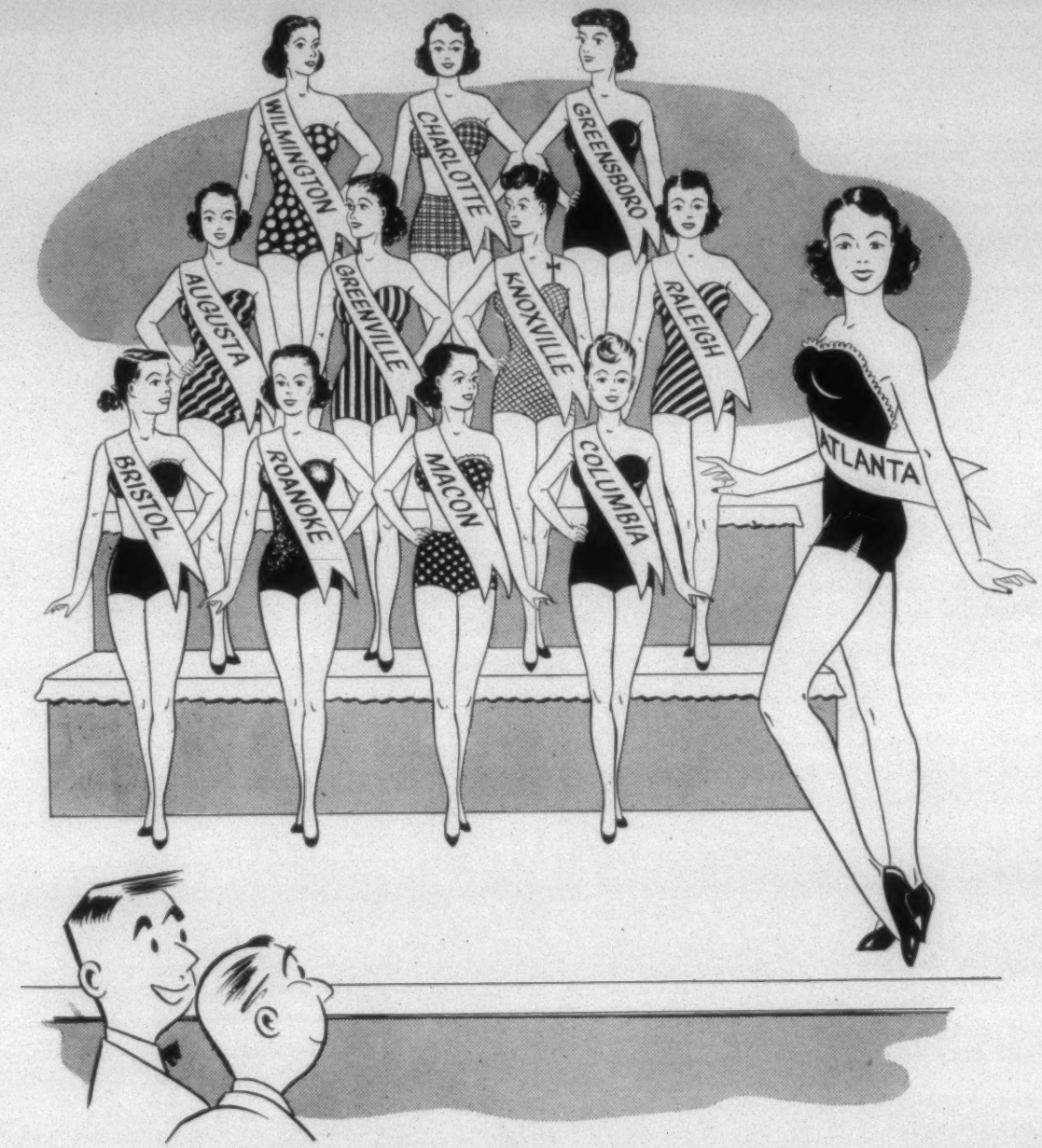
Senate passage of the bill to return off-shore lands to the coastal states was a stunning defeat for New Deal senators and the C.I.O. For the third time Congress is giving back the submerged lands of California, Louisiana and Texas that were seized by Interior Secretary Ickes when oil was found under the water. The act was described in the Senate as nationalizing these lands.

In a five weeks' filibuster by Senate "liberals" against the off-shore lands bill, a total of 970,872 words were spoken in the opposition. It was the longest filibuster on record, and carried on by 25 senators who have been loud in denouncing opponents of F.E.P.C., and "civil rights," who resorted to filibusters against these measures.

C.I.O was charged by Senator Holland (D., Fla.) with conducting a nation-wide campaign of "false and misleading propaganda" on the off-shore oil issue. He said the sum of money involved was being grossly distorted, and described as a "huge give-away" of $300 billion, or more. He said the real issue was to give back what had been unlawfully taken from the coastal states.

Frequently during the five-week filibuster it was charged that C.I.O. lawyers and research men were writing the long speeches being delivered. C.I.O. did not deny the charge. All speeches had the same appearance in mimeographing, and the same phrases, allegations and arguments were used over and over without change in phraseology.

C.I.O. is applying strong pressure to induce Mr. Einsenhower to nominate John W. Edelman for Assistant Secretary of Labor. There is hesitancy because of the certainty of strong opposition to confirmation because of Edelman's political



"Man, this will be tough to judge. They all have everything!"

background and rating as a "leftist." The White House does not wish to risk a battle with the Senate, with almost certain rejection.

Senator Byrd has proposed a budget formula which he says will balance the budget, not impair the defense program, and get the government out of its financial jungle. He says taxes cannot be reduced before the budget is balanced without pyramiding deficits. For years financial responsibility has been thrown to the winds, he asserts, and now "austerity" measures are required to restore a balance.

Congress would take steps to clarify the meaning of immunity in testimony under the Constitution under a bill proposed by the Senate Internal Security Committee. It would allow immunity where testimony is essential to the solution of crime. The committee says the Fifth Amendment is being used to conceal the facts of Communist conspiracy, and giving rise to greater abuses than it would prevent.

A Communist super-lobby, exerting strong pressure on Congress, is wedged tight around nine present and expelled C.I.O. unions, the Un-American Activities Committee was told. The group engages in racial agitation, for "civil rights" legislation, and for Moscow's objectives in foreign affairs, the committee was told. The testimony indentified 65 new Communist agitators, 23 of whom are teachers in grade and high schools.

Authority to three departments to dismiss employees when "deemed advisable" in the government interest was refused by the House. The move was intended to open the door to dismissal of subversives and Communists. But House members felt it would suspend job rights of veterans and career workers, too, with no appeal or even citation of charges. The proposal would have applied to the State, Justice and Commerce departments.

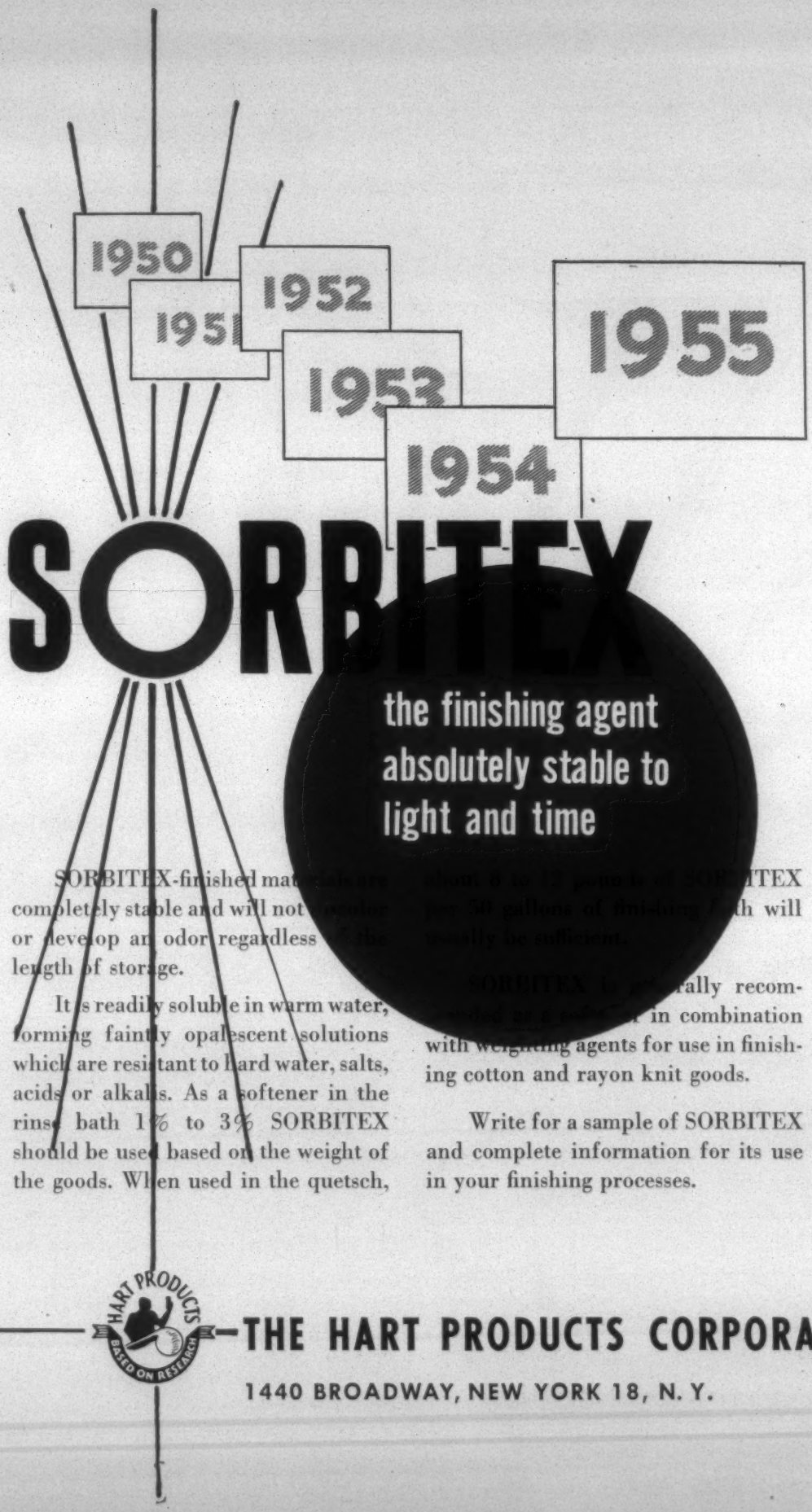
President Meany submitted a long list of amendments to the Taft-Hartley Law to the Senate Labor Committee on behalf of A.F.L. The proposals would change every basic provision in the law. In addition, he asked that the government virtually get out of labor relations, and give full freedom to unions and employers in the areas of collective bargaining, mediation and voluntary arbitration.

Majority Leader Taft intends to call up revision on the Taft-Hartley Law in the Senate early in the Summer. Opponents of the law hold out the shadow of another filibuster if an effort is made to "tighten up" the law, increase the area of jurisdiction of the states, or reorganized N.L.R.B. House members are intent on greatly strengthening the law, and widening powers of the states.

Taft said pointedly, however, that changes in the labor law will be held up if a racial anti-discrimination proposal is made a part of the revision bill. He said it will meet with formidable opposition from Southern senators, who will look on it as "civil rights" in a new dress, and not germane. A proponent, Senator Ives (R., N. Y.), agreed it "might obstruct matters."

Attacks on Mr. Eisenhower and his Administration by so-called "liberal" and New Deal writers and columnists are climbing to a new high in violence. Efforts are being made to drive a wide split in the Republican ranks, and spread the belief that the Democrats "are bailing out the President." Much material for attacking Eisenhower is coming from A.F.L. and C.I.O. publicity staffs.

While strong efforts are being made to deprecate the effort for economy in government, still there is a lot of strength in it, and all results do not show on the surface. For the first time since 1933 a President is asserting leadership in budget cutting, and frugally handling the tax dollar. Drastic cuts are being made in small items, leaks plugged, and waste stopped.



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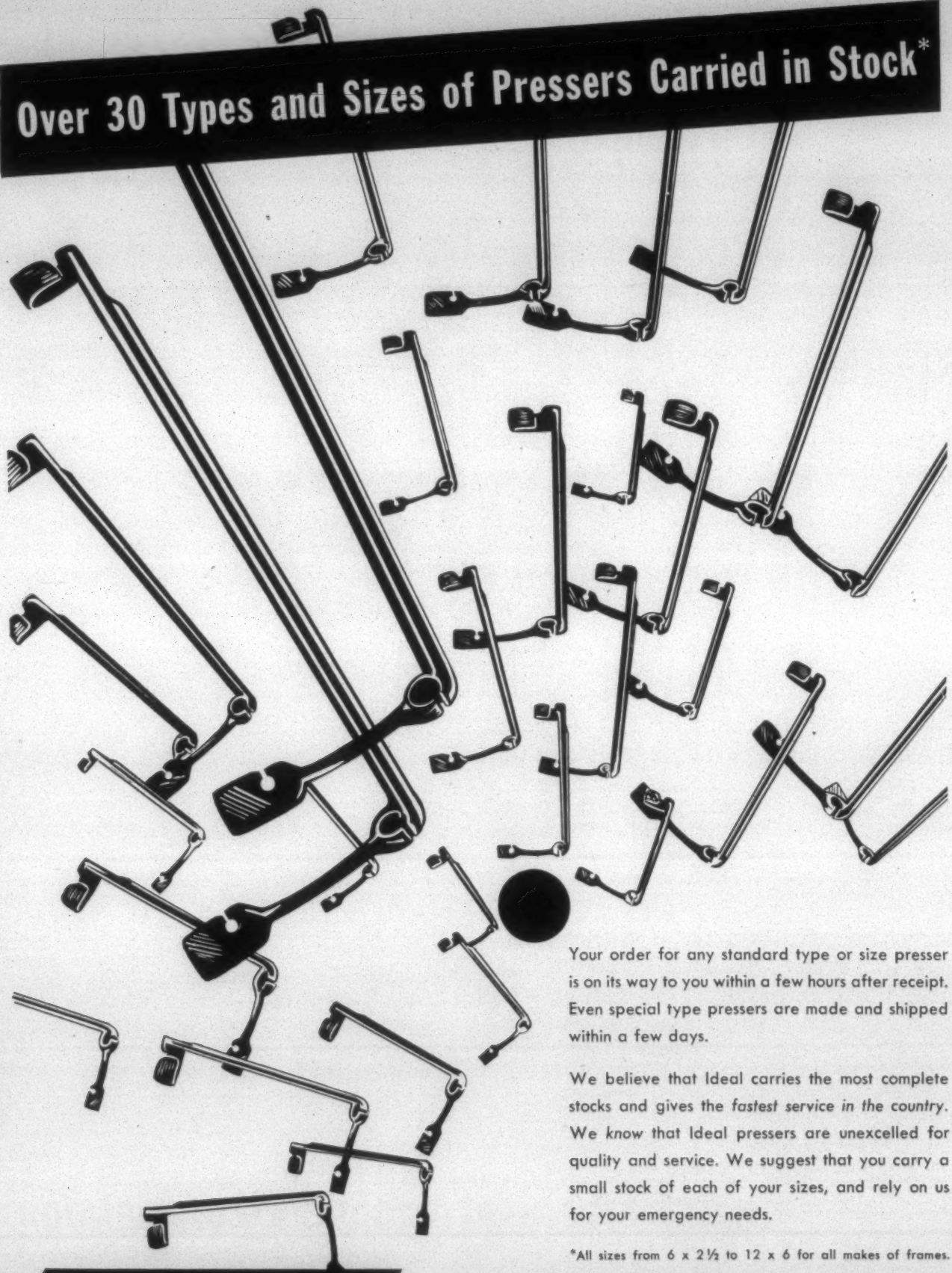

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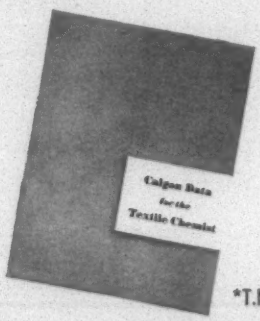

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ALGOSOLS are water soluble esters of vat dyes. They produce the same brilliant shades and have the same fastness properties as the parent vat dyestuffs from which they are derived. On cotton and rayon they are more level dyeing and have better penetration than ordinary vats. Prints are smoother and clearer than normally applied vat dyestuffs. On wool Algosols have superior light and wash fastness without impairment to the quality of the wool. The method of applying Algosols is simple and inexpensive.

COTTON

Mercerized cotton piece goods of constructions otherwise difficult to color, have outstanding smoothness and penetration when dyed with Algosols. The shades of colored yarns used for cross-dyed effects in striped shirtings, etc. are not affected when over-dyed with Algosols. Mercerized and other types of cotton yarn dyed in package dyeing equipment are uniform, evenly colored from outside to center and free from crossovers.

WOOL

Suitings dyed with Algosols have excellent fastness properties even in light shades. Blankets and knitting yarns have outstanding fastness to light and washing. Algosols are recommended for dyeing slubbing and yarns in circulating machines. Shrink-proofed wool dyed with Algosols has excellent fastness to light and repeated washings. Wool can be dyed with Algosols without impairment to the quality of the wool.

RAYON

Rayon piece goods composed of filament, spun rayon or filament-spun rayon yarn when dyed by the continuous method or on the jig have solid, clear shades and excellent fastness. Rayon skeins are easily dyed on the 'Cascade' type machine. Algosols are excellently suited for dyeing packages and cakes in pressure dyeing equipment.

PRINTING

In roller, screen and resist printing prints are smoother and colors clearer than the normally applied vat dyestuffs from which they are derived. Algosols have excellent light and wash fastness and do not crock. Blotch printed drapery fabrics have smooth grounds with excellent fastness to light and washing. Algosols are ideal companion colors for Rapidogens and Fast Color Salts.

MIXED FIBERS

Suitings and dress goods of spun rayon and wool blends dyed in solid shades meet all fastness requirements. Special effects can be obtained on cotton-wool and rayon-wool mixtures by dyeing the wool and leaving the cellulosic fibers undyed or on viscose-acetate blends the viscose can be dyed fast color and the acetate tinted to yield two-tone effects.

COST

The simplicity of application, saving in time, lower cost of chemicals, superior dyeing and printing results offset any increase in dye cost over ordinary vats in light and medium shades. Not infrequently Algosols prove cheaper in light shades.

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   Never fails to operate . . . and *will not open if rebound occurs.*
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Background Knowledge

A QUALIFICATION which I believe is becoming more and more important in these modern times of fast growth and evolution is that a man, whether a salesman or in any other field, will perform better and go ahead faster if he has attained a sufficient amount of background knowledge about his business, rather than being just a specialist. The days of the specialist getting to the top of the business heap seem to me to be becoming more and more numbered. Background knowledge as applied to the textile salesman implies that a good salesman must know something of manufacturing; he must have technical knowledge of yarns and their properties; he should know a great deal of cloth constructions; he should be well versed on the trends of fashion and technological developments; he should know a lot about the ins and outs of the company he is working for, its aims and objectives, its problems and its triumphs; he should know what other fields his company is in, and why; he should know at least roughly how costs are computed, and be able on occasions to do some rough but approximately accurate cost figuring of his own; he should know what significant factors are in textile balance sheets; he should be able to look at fabrics and make intelligent and fairly accurate appraisals of their values; he should have not only a sense of eye for fabrics, but also a sense touch—even, if you please, a sense of hearing and smell—he should have good conceptions as to the significance of the swishes and the odors.

Perhaps the textile industry, more than any other, demands all-around knowledge of its every phase for the greatest individual success and progress. Perhaps this is because there are no such things as standardization and set rules in the industry. One company and one loom can make literally thousads of fabrics, and every one of those thousands are week-by-week and month-by-month subjected to constant change and improvement. Of all the industries, textiles is the most flexible, the one where fixed and stable price lists have the least meaning to the alert salesman. And because the textile industry demands breadth, quick thinking, knowledge and flexibility, it offers considerably greater rewards to those who get to the top than the averages of other vocations and industries.

The most successful salesmen of the future will be those who have the broadest basic training and knowledge. I believe that this will also be true of the most successful technicians, financiers and manufacturing men. I believe that the wide-awake colleges and business schools and technical schools are all beginning to recognize this more and more. Even the more specialized schools are considering plans for broadening out.

One of the greatest voids and challenges to top management in the larger units of American industry today is the shortage of tried executive material. This is mainly because the tremendous industrial growth of the last quarter century and the development of multiple organizations has produced to too great a degree a generation of specialists, and in this rapid process we have not sufficiently recognized the need for development of executives with all around knowledge, experience and qualifications. When the needs have been urgent and the best specialists were tried in top roles, too often it has been too late to train them and the specialist has made a failure. It is necessary to start broadening training and experience while men are young and flexible and able to absorb.—*J. Spencer Love,* chairman of the board, Burlington Mills Corp., before the Textile Salemen's Association in New York City.

Kindly Atmosphere

THE climate that is engendered by the American way of life has proved most beneficial, to good and bad citizens alike.

Take Earl Browder, infamous American stooge of the Kremlim, who makes a bounteous living in this country simply by trying to turn it over to the Russians, lock, stock and barrel. And he certainly enjoys the prerogative of the Fifth Amendment, even while secretly plotting to throw it and the rest of our Constitution into the Soviet ash can.

He used the "self-incrimination" clause of the Fifth Amendment to refuse to say wheather he was the author of a book called "Communism in the United States"—a book, which is only one of numerous anti-American books discovered to be a part of those circulated overseas by our State Department.

Browder wasn't at all intimidated by the committee chairman, Sen. Joe McCarthy. He would have whined a cringing assent had the remark, put to him by McCarthy, come from the lips of one of his Kremlin masters. But since it was only McCarthy who said he had no admiration for Mr. Browder, Mr. Browder wasn't afraid to be cocky; "Certainly, that is quite mutual," Browder sneered.

Another witness, Sol Auerbach, better known by his pen name of James S. Allen, lectured the senators of the committee to the effect that Socialism was "inevitable" in the United States. We wonder if he would have dared sat in the Kremlin and tell the Red inquisitors that capitalism was inevitable in Russia. Somehow, we doubt it. And had he done so, nothing could have been more inevitable than his own quick demise.

All of those questioned, except Browder's lawyer, refused to answer whether they were or ever had been Communists, saying to do so might incriminate them, and using the Fifth Amendment as a shield. The American climate which they castigate at every opportunity in favor of the Communist "freedom" was being very kind to these renegades.—*Mooresville* (N. C.) *Tribune.*

A Bad System

SEN. BURNET MAYBANK (D., S. C.) has protested the awarding of textile contracts on any basis but the lowest bidder for the quality specified.

It's the old New England story. Textile employment is off in that section bacause the mills do not have the orders. The Southern mills are making the better prices. The government has instituted, therefore, a system giving preference to plants not working over two shifts a day, even though the bid is higher.

This newspaper has no objection to federal assistance to New England if

relief is needed. But if relief is to be granted it should be given in a legitimate way.

To establish any procedure through which qualified bidders are denied business because a bureaucrat thinks the business should go elsewhere opens a door that could lead to fraud, or at least to favoritism of the rankest sort.

Senator Maybank is right is making the fight. He has persuaded the Senate-House defense production committee to investigate all contracts let under the preference system. The defense mobilizer, Arthur S. Flemming, has agreed also to make inquiry to determine whether the diversion of contracts to "distress areas" (that's New England), is providing work for the jobless in one area and at the same time causing unemployment in another.

If our mills are working on three shifts and New Englands' on two, what is to be gained to build up employment in the East at the expense of workers in the South?

In a country like America, government contracts should invariably go to the lowest bidder, unless the lowest bidder cannot meet the requirements, or unless there is a national emergency which puts speed ahead of cost. It would be foolish, for instance, in time of war to delay important manufacturing for the sake of a saving.—*The State*, Columbia, S. C.

Man Not An Island

REACTION to the overgrowth of federal power in some directions is a healthful reaffirmation of our basic concern with individual liberties. But unless that reaction is tempered by a clear understanding of what is and what is not the public interest it will play directly into the hands of predatory men who always know exactly what they want.

A writer in the Public Letter Box the other day deplored the increase in school taxes because he thought it unfair for a parent with one child to pay as much to support public schools as parents of four or five children.

A magazine article complaining of federal power projects claims it is unjust for Ohio which has no federal power to be taxed for the advantage of the people of Tennessee served by T.V.A.

At the same time some congressmen are arguing the principle that any resources which happen to be found within the boundary of a state belong exclusively to that state, despite the massive weight of legal and historical opinion to the contrary.

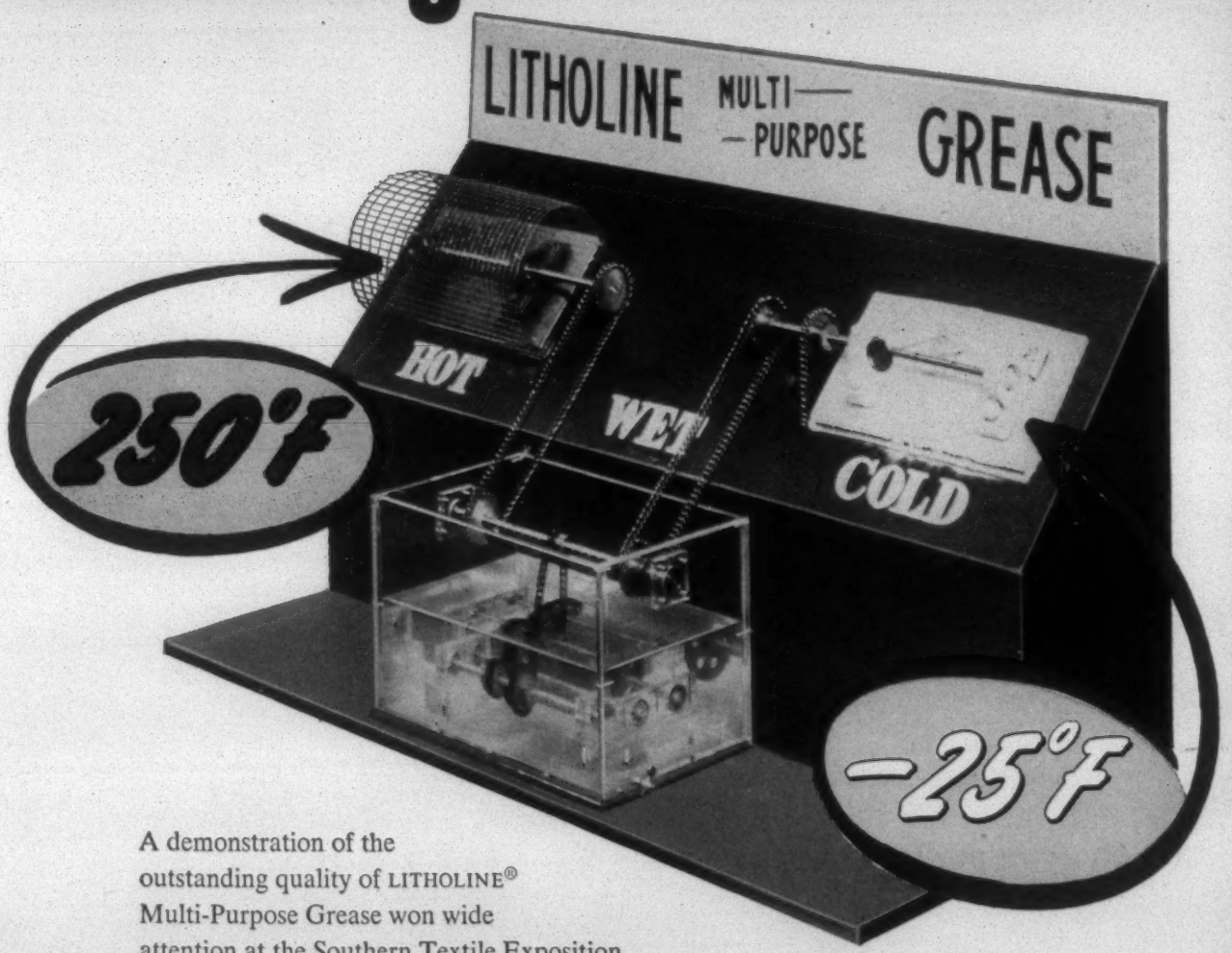
All of these arguments add up to the ancient heresy that each man is an island. They deny that there is a public interest. If their logic persuaded, they would make not just big government but all government obsolete.

Do the people of Ohio have no connection with the people of Tennessee? Don't they sell things across the border which the Tennesseans without the prosperity of their remade river valleys could not afford to buy? And don't the people in Tennessee, in turn, aided by cheap power make things desirable in Ohio?

Does not the bachelor profit equally with the family man by the general cultivation of literacy, knowledge and civilization through public education?

It is precisely the point of any social organization that it can tap the pooled resources of its members to provide

TESTS PROVE Important Advantages of Litholine!



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benefits for the whole, that it does not keep books on each individual doling out to him dollar for dollar the value in services for his contribution.

Cutting down the range of government activity should not mean cutting up the nation and casting each section, each state, each community back on the resources which by a trick of nature or history were included within its boundaries. That way lies national weakness, plunder for the few and poverty for the many.—*The Detroit* (Mich.) *News.*

Technical Writing

RAPIDITY of technical developments and the intense pace of modern living place a premium upon the amount of time that can be devoted to reading. This problem is compounded by reason of the large and continually increasing number of technical meetings and publications.

Let us assume that an engineer has "x" minutes of reading time available each month. How can he acquire the greatest return on the investment of that time? Or in slightly different terms, how can he maximize his intellectual input in terms of comprehension and breadth of understanding?

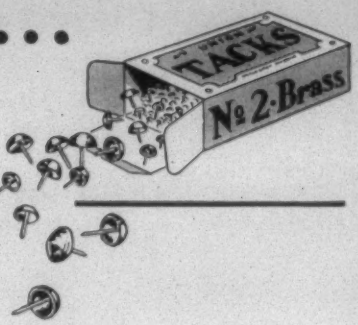
At leath three primary elements are involved in this problem: the reader, the writer and the subject matter. Secondary but no less important factors may be the motivation of the reader and his knowledge of the subject under consideration, the technical understanding and the literary skill of the writer, and the nature of the subject matter—its newness, familiarity or complexity.

On the assumption that the writer has made a conscientious effort to eliminate vague, obscure or ambiguous material, the reader must be willing to put forth the mental effort necessary for comprehending the subject matter. To expect that complex engineering developments can be grasped without such intellectual exertion is to disregard the basic nature of the learning process. Actually the instructive function is one of the most important aspects of technical writing, and the author should be conscious of its significance.

There are some types of technical writing, such as news items and promotional material, that readily lend themselves to a personalized, simplified presentation. However, there is an

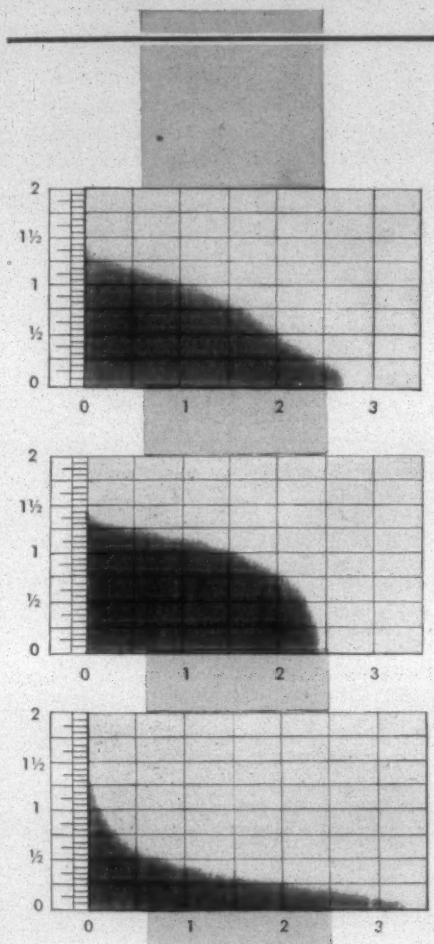
When you get down to brass tacks . . .

here's what a comber should do!



It should:

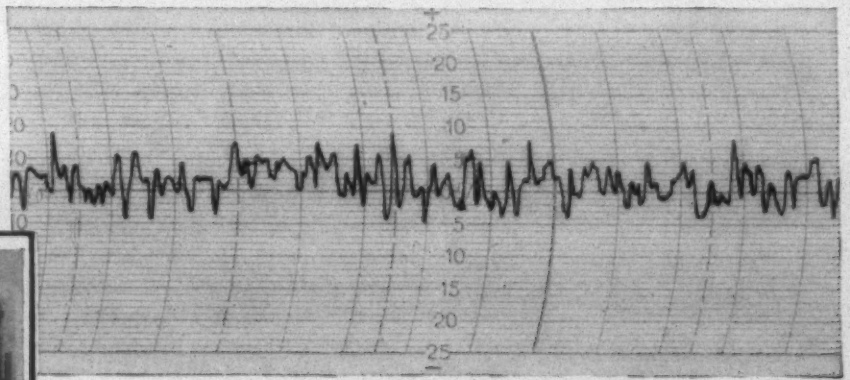
- Produce high quality sliver with low variation.
- Reduce neps to the lowest possible amount. The ratio will vary from 3:1 to 6:1 depending on the staple and the amount of noil.
- Remove practically all of the short fibers and few or none of the long.
- Produce at a high rate compatible with space required, investment costs, and total combing expense.
- Operate with a low productive cost per pound.
- Be easy to adjust, and hold the settings between overhauls.
- Run at high efficiency, requiring minimum expense to maintain, lubricate, and repair.
- Function so simply and smoothly that operator efficiency is high.



The above fiber arrays show the quality of work done by the Whitin "J" Comber. At top, ribbon lap; center, combed sliver; at bottom, noil. Note that practically all of the short fibers have been removed and only a very few long fibers combed out.

. . . and that's just what the WHITIN model "J" does!

For all-round efficiency, versatility, and superiority of design, it has been acclaimed in both the United States and Europe. Thoroughly tested in mill installations ranging from a few to as many as 200, the Model "J" Comber is recognized as the finest comber yet developed.



Section from Uster graph made in mill test, Whitin "J" Comber sliver. The stock is 55 grain Pima. Test data: average variation, 17.6 per cent; maximum variation, 30 per cent.

Whitin MACHINE WORKS

WHITINSVILLE, MASSACHUSETTS

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WHAT OTHERS ARE SAYING———

inherent danger in applying such techniques to significant papers on complex advances. It arises from the deceptive simplicity of a type of writing that allows the reader to gain a superficial grasp of a subject without achieving real understanding. In other words, ease of readability may be a misleading criterion when it comes to papers of lasting value in the engineering literature.

On the other hand, it may be pointed out that some well-known scientists and authorities on technical matters have shown the ability to explain highly abstruse subjects in simple terms and in a style readily comprehensible to the average person.

Readable technical writing is a product of the interaction of the reader, the writer and the subject matter. The reader who prefers what might be termed sugar-coated writing may be confusing superficial acquaintance with genuine understanding of subject matter. To obtain the greatest return on an investment of reading time requires willful mental effort on his part. It is in this manner that technical writing is transformed into usable personal knowledge.—*Combustion.*

Responsibility Of All

AT this writing the present Administration has been in office about four months, but already there are signs of a new era in business-government relations. There is a definite trend toward intelligent co-operation between every segment of the American public—business, labor and the general public. Most of us will agree that the change is a refreshing one compared to the philosophy which has guided the country for the past 20 or more years.

Government has shown us a way of co-operation; it is up to us to follow the lead. From all indications the new Administration is going out of its way to be eminently fair to every segment of our population. The rule of conduct seems to be the "common good." It is the responsibilty of businessmen everywhere to maintain the same standard of conduct.

One vital truth stands out: If the government attempts to co-operate with all of us, we, in turn, should co-operate with the government. This applies to business, labor and the entire American public. If we expect things from our government, it naturally follows that the government expects something from us. The two-way obligation is the keystone of our American way, and was wisely incorporated into the Constitution by our founding fathers.

Here at Warner, our primary concern is co-operation between business and government. The relationship between these forces is responsible not only for the welfare of our employees, but in a great measure for the welfare of the community as a whole. Whether executive or unskilled laborer, there can be no shirking in this responsibility of co-operation. None of us should forget this fact.

In turn, we expect from government relief from unfair controls and unjust tariffs, and elimination of other stumbling blocks to sound business practice. In the course of this relief, one yardstick should be used: What is best for the greatest majority of Americans?

There is no easy way for any of us. We will have to "give and take" along the entire route. In the end, all of us will benefit from it. No rewards are possible without some sacrifice; no sacrifice is without its reward. Business, labor, and all of us will gain immeasurably when we have learned and followed this principle.—*Steven P. J. Wood,* executive vice-president of Warner Electric Brake & Clutch Co.

Slave Labor Law?

IN the whole history of uplift polemics it is doubtful if anybody ever repealed a favorite epithet more abruptly than Arthur J. Goldberg has recently done. Mr. Goldberg is general counsel for the C.I.O. The labor movement has been denouncing the Taft-Hartley Law as a "slave labor law" ever since its enactment. But last week Taft-Hartley suddenly stopped being a slave labor law in Mr. Goldberg's book. And why? Because Senator Smith, of New Jersey, had just proposed lifting Taft-Hartley off the necks of the building trades workers and people in localized public utilities.

But why should Mr. Goldberg resist this emancipation of his labor brethren in the building and utilities trades from a law which has kept them in slavery for six solid years—to hear the C.I.O. tell it? Even if a tyrannical Congress still refuses to cancel Taft-Hartley in toto, shouldn't Mr. Goldberg cheer suggestions that its shackles

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be struck from the necks, wrists and ankles of some groups of working men?

Not the way Mr. Goldberg and the C.I.O see the picture, now that partial cancellation is actually threatened. The threat of partial cancellation of Taft-Hartley seems to have forced the C.I.O. and its counsel to remember what a stalwart defense of labor's dearest aspirations Taft-Hartley has been and is—in spite of the six years of systematic misrepresentation involved in all that "slave labor" talk. Without Taft-Hartley, building trades and utilities workers will come under state labor laws. Again and again Mr. Goldberg and his associates have found state legislators looking at their claims a good deal harder than the Congress.

Taft-Hartley, after all, reaffirmed the rights and privileges of labor unions as stated originally in the old Wagner Act. It merely added to labor's rights and privileges a restatement of management's rights and privileges under the rule of law and the principles of constitutional government. It was this balancing up of congressional labor policy, this insistence that management had as much right to equal protection under the law as does labor that turned Taft-Hartley into a "slave labor law" for the more ingenious labor publicists. It is good to see Mr. Goldberg at long last repealing this untruthful epithet. —*The Sun,* Baltimore, Md.

From Whence Success?

WHETHER your company still is in existence and making a profit ten or 20 years from now, or what kind of a product it will be making or selling then, is more likely to be determined by what happens in the laboratory than in the accounting office, in the sales office—or even in the halls of Congress or the White House. If you don't believe me, think back 50 years. The changes that occur in the next 25 years will be every bit as great as those of the last 50. How many companies of today even existed 50 years ago? And of those that do date back to 1903 how many were than making products or using methods which were the same as those of today? And how many companies of 1903 have gone out of existence—because they stuck to a product which became obsolete? Yes, in 50 years we have gone from

MILL OPERATING REPORT
ON CLEANING COTTON WITH AIR
#2

To further compare conventional cleaning machinery with Super-Jet cleaning, some strict good ordinary cotton, containing 8.4% trash as shown by a Shirley Analyzer, was put through a vertical opener and a Buckley opener, after which, 6.4% trash remained in the cotton.

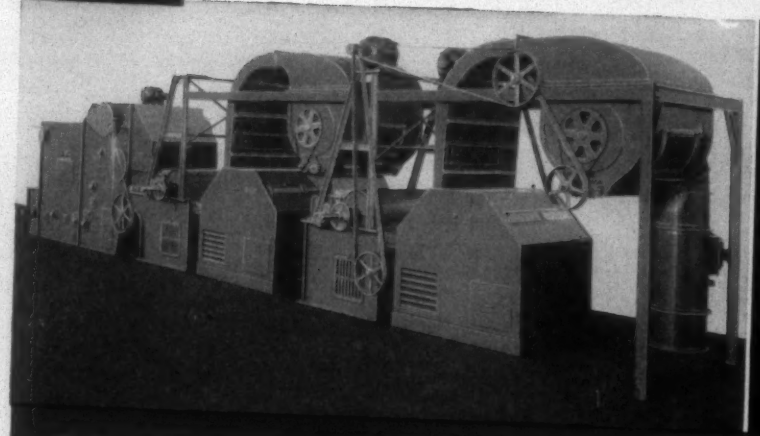
This cotton was then put through a Tandem Super-Jet System, and then only 3.0% trash remained in the stock.

The Super-Jet System therefore removed 70% more trash than the conventional machines, and took it out after those machines had partially cleaned this cotton.

Furthermore, the waste from the conventional machines contained 34% fiber, 3.8% of which was of staple length; while the Super-Jet waste contained 15% fiber, 1.1% of which was staple length.

The Super-Jet waste contains from two to three times the quantity of motes removed by the conventional machines.

If you would like to visit a mill where results comparable to these are being obtained, we will gladly arrange it for you.



TANDEM
Super-Jet
CLEANS ENTIRELY WITH AIR

ALDRICH-LUMMUS CLEANING SYSTEM

LUMMUS COTTON GIN CO.
Columbus, Ga.

Made by ... *Sold and Installed by* Aldrich Machine ...

wagons and kerosene lamps to airplanes and television. And whence came all these changes? Did anyone in Washington invent the electric light? Did the accounting department invent radar or television? Did the political actions of Theodore Roosevelt or Woodrow Wilson create the radio industry or the oil industry?

No, the really great changes of the past—as of the future—stem from the creative ideas of men and women working in the laboratory, in the drafting room, and in the shop. And the management that ignores what goes on there is ignoring the real things that affect the future.—*Dr. Lee A. DuBridge,* president of the California Institute of Technology.

Educational Is Right

TAKING prominent part in the talkathon in the Senate against the tidelands bill have been such sterling characters as Humphrey of Minnesota, Lehman of New York, Douglas of Illinois and Morse of Oregon. These are the same laddybucks who so strenuously opposed filibusters on civil rights. They are the same fellows who made such an outcry against all filibusters at the beginning of the present session of Congress. All of them claim to be engaged in an "educational campaign" for the benefit of the uninformed masses of the American people.

The performance has been educational, all right, and especially in proving what a difference it makes when your ox or someone else's is being gored, or filibustered. If we were to hope that Morse, Humphrey, Lehman, Douglas, *et al* would hereafter be ashamed to condemn filibusters, it would be permitting hope to gain an utterly unjustified victory over experience with them—*Commercial Appeal,* Memphis, Tenn.

The Southern Boom

FOR the first time, the South in 1952 outpaced the remainder of the nation in virtually every economic category.

So says the *Blue Book of Southern Progress,* an authentic statistical reference on business, industry and agriculture, published by the *Manufacturers Record,* of Baltimore.

The year will go down in the records, the *Blue Book* says, as the one in which the South definitely became established as an industrial competitor.

Business volume in Dixie climbed from $196,000,000,000 to $210,000,000,000, more than one-fourth of the national total. Manufacturing output reached $56,000,000,000, and farm output jumped to $12,000,000,000, one-third of the nation's total.

The remainder of the list is equally imposing. Georgia, the fourth largest of the 16 states surveyed, also ranked fourth in business volume and in most other categories, showing impressive growth over 1951 and an astonishing rate of development since 1939.

News of such accomplishment is a welcome challenge. We still are a long way from maximum utilization of our climate, labor supply and natural resources. The achievement of the last 15 years can serve as a jumping-off point for future growth if we use these blessings wisely.—*The Atlanta* (Ga.) *Journal.*

Some people can stay longer in an hour than others can in a week.—*Asheville* (N. C.) *Times.*

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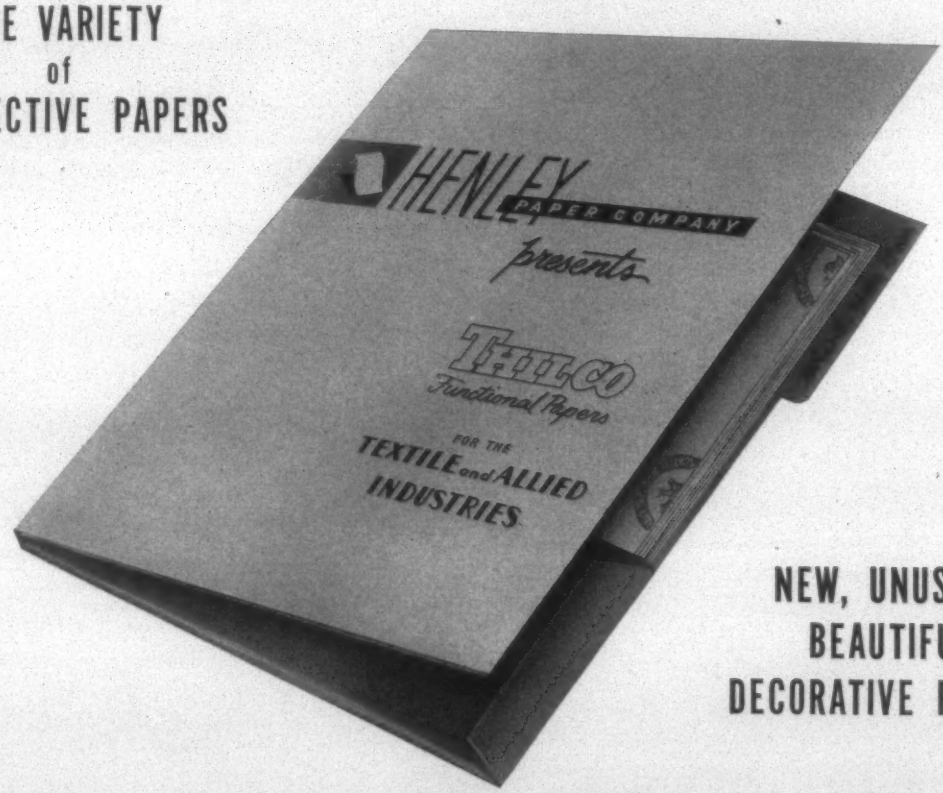

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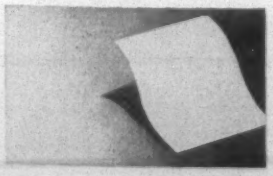

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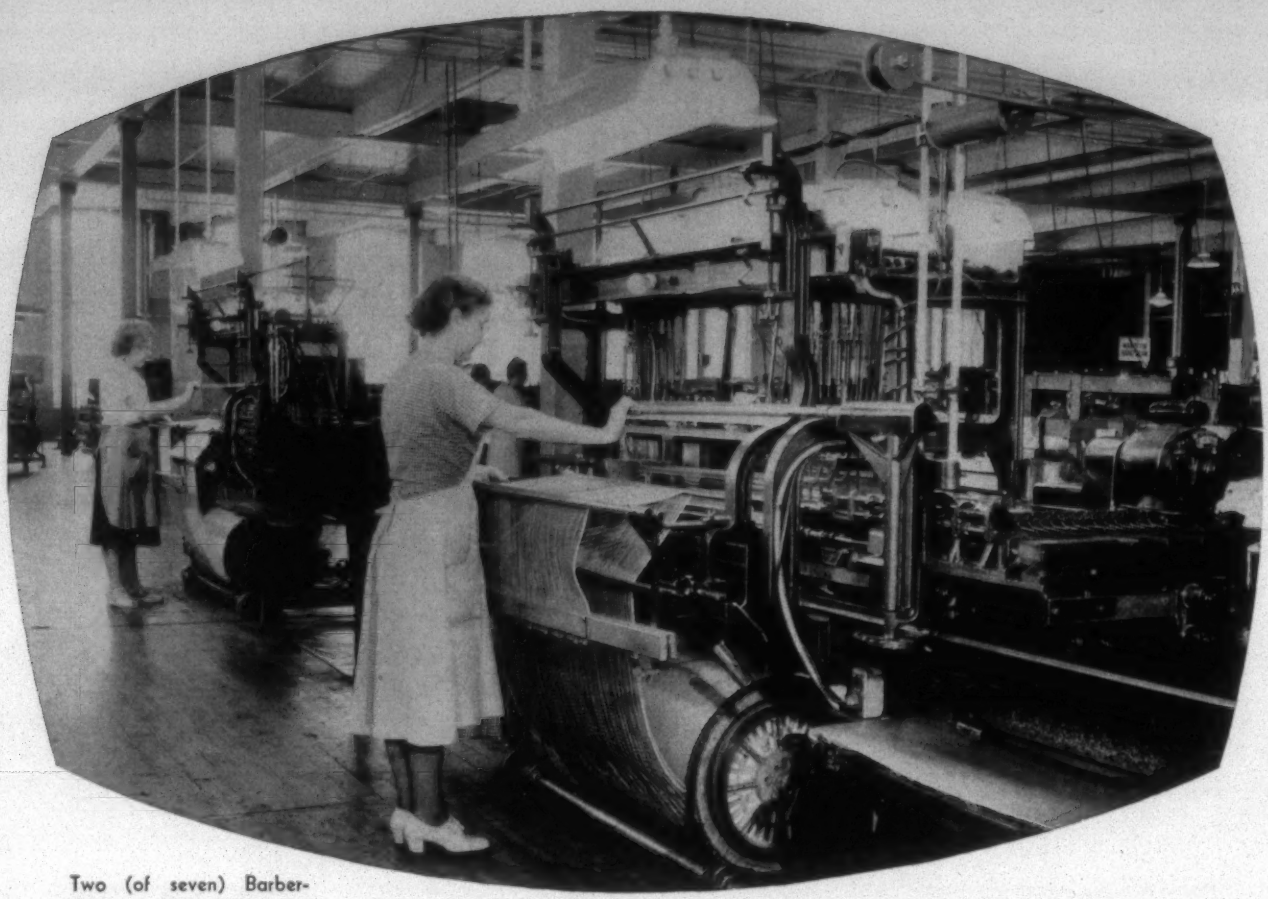

Two (of seven) Barber-Colman Warp Drawing Machines in the Dan River Mills, Schoolfield Division, Danville, Virginia. These machines draw up to 10 harness and 4 banks of drop wires. Operatives are two women and one helper.

BARBER-COLMAN WARP DRAWING MACHINES Reduce Drawing-in Costs

In a mill where patterns are changed frequently, the speed, accuracy, and versatility of Barber-Colman machines are the basis of a good investment. These machines provide rapid warp renewal for straight or complicated draws with equal efficiency, draw plain or multi-colored warps, perform single or double draws on one or two sheets, and work from either a leased or flat sheet. The reed, harness, and drop wires are all drawn simultaneously. The machines shown above are delivering around 9 warps a day of cotton stripe material that runs 2884 ends, 67 sley, employs a straight draw, uses 6 harness, 4 banks of drop wires, and is drawn at 200 picks per minute.

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WARP TYING MACHINES
WARP DRAWING MACHINES

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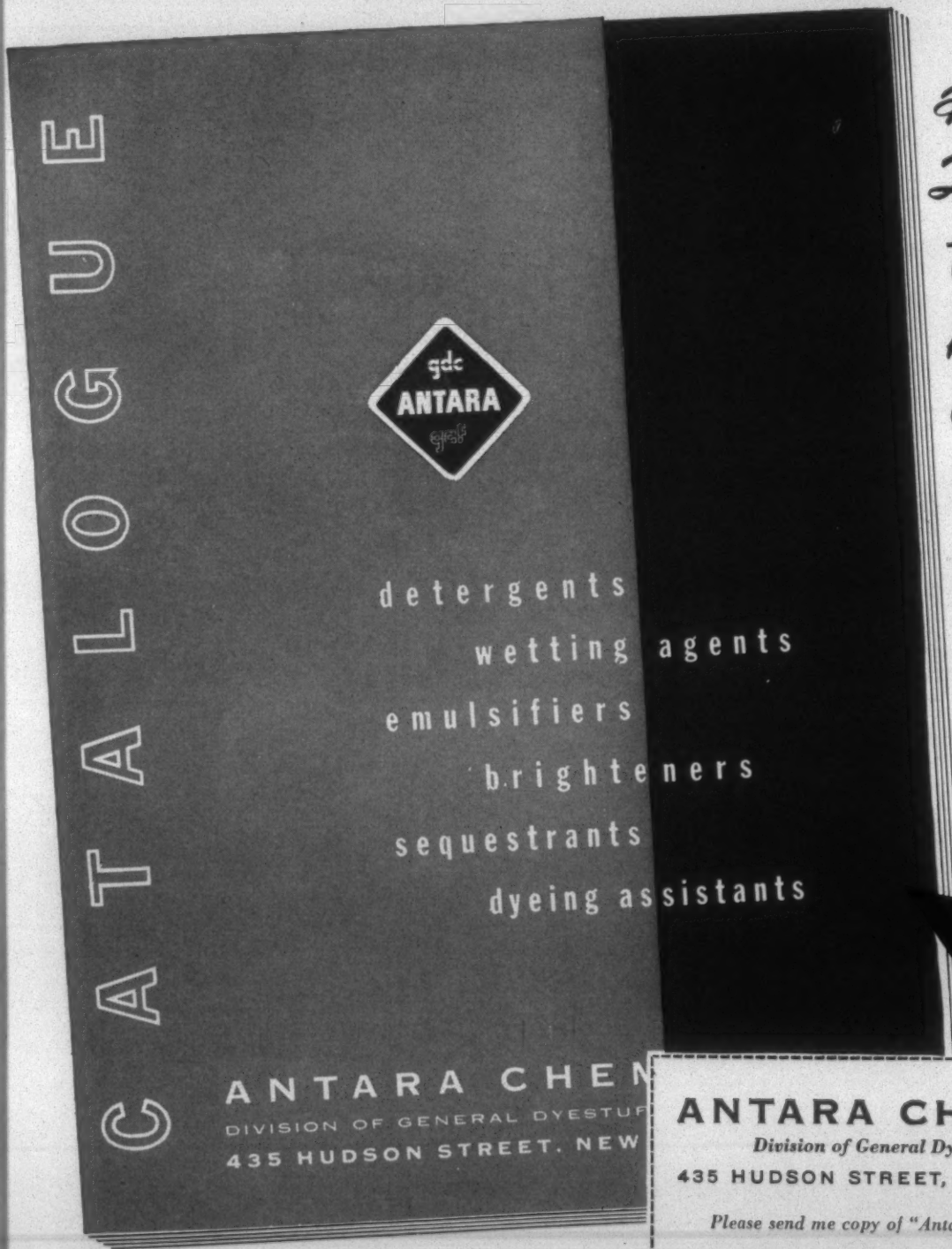

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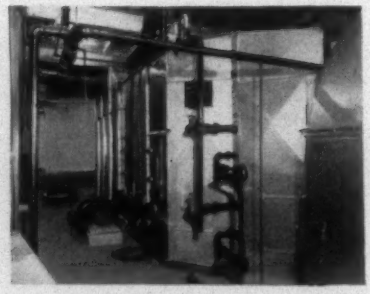
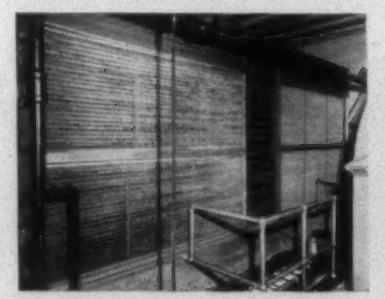
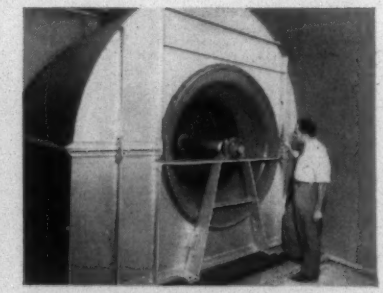
1. Plenum chamber, showing fresh air dampers at left, recirculating dampers at bottom, and lint screen at right.



2. Apparatus room for south system, with air washer and heater coils.



3. Heater coils and by-pass dampers located in the north system of mill.



4. Fan which propels the properly conditioned air through the distribution ducts.

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Tallassee Switches to Pearl Starch ...and GAULIN Homogenizers

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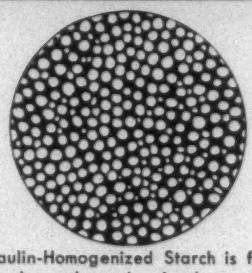
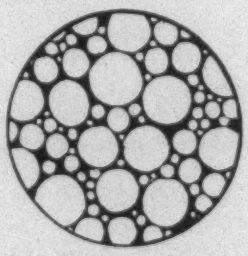


Gaulin-Homogenized Starch is fine, regular and evenly mixed.



Boiled Starch is comparatively coarse, irregular and unevenly mixed.

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textile bulletin

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TEXTILE BULLETIN is devoted to the dissemination of information and the exchange of opinion relative to the spinning and weaving branches of the textile industry, as well as the dyeing and finishing of yarns and woven fabrics. Appropriate material, technical and otherwise, is solicited and paid for at regular rates. Opinions expressed by contributors are their own and not necessarily those of the editors and publishers. A companion monthly journal, THE KNITTER, is devoted to the interests of the knitgoods industry.

Vol. 79 May 1953 No. 5

McAden Promoted To Editor

By DAVID CLARK, *President*

James McAden Jr. has been promoted from editorial director to editor of TEXTILE BULLETIN, succeeding the writer, who was editor of the publication since it was established March 2, 1911.

The writer suffered a very severe heart attack Jan. 3 of this year, but now is able to come to the office for a short time each day. Upon the advice of physician, the writer will refrain from again assuming any active editorial duties.

Junius M. Smith, who has been with Clark Publishing Co. for more than 30 years, continues as vice-president and business manager in charge of all of the company's operations.

Jim McAden has been associated with Clark Publishing Co. since August 1942 and in recent years has written many of the editorials appearing in this journal. He is an alumnus of the University of North Carolina, a member of the Charlotte Rotary Club and the Charlotte Textile Club, is a vestryman of St. Peter's Episcopal Church, and is secretary-treasurer of the Southern Textile Association. We feel that he is well qualified to fill the position to which he has been appointed. All of the editorials in recent months have been prepared by him and thus he has been performing his present duties since last December.

An addition to the editorial staff has been made in the appointment of David McK. Clark, a cousin of the writer, as associate editor. David McK. Clark became an ensign in the United States Coast Guard after graduating from Wake Forest College in 1951, was released from service when the writer became ill, and joined our staff last month.

Current State Of The Textile Unions

We don't pretend to have a direct line of communication into the hierarchy of the C.I.O., nor into its Textile Workers Union of America. Nevertheless, we believe that even a farmer in Utah who might have been following textile union activity in the papers during recent months would surmise that some T.W.U.A. heads are rolling and that all is not sweetness and light within that organization.

We wouldn't be inclined to waste a lizard tear on the T.W.U.A. plight, let alone a crocodile tear, but it is pertinent for those in textile management to be alert to the present situation and what machinations of recent months might mean in the near future.

John Riffe is a big-shot C.I.O. personage who recently has been appointed its executive vice-president and director of organization. While there has been some talk of C.I.O.-A.F.L. co-operation, the two major unions are steering away from any co-operation in textiles. This means that Emil Rieve's T.W.U.A. crowd and George Baldanzi's U.T.W.A. (A.F.L.) outfit will continue to raid each other. John Riffe also has stated publicly that the next major C.I.O. drive will have a Southern textile accent.

To effect the upcoming drive in textiles, Mr. Riffe has been moving his pawns around and generally reorganizing the T.W.U.A. staff. Franz Daniel, C.I.O. director for North Carolina, is being transferred to the Middle West. Lloyd Vaughn, head of the South Carolina office at Columbia, is being moved to Atlanta, Ga., as an assistant organizer. Mr. Riffe said that the old "unwieldy" structure had caused C.I.O. organizational work to "bog down." That would be a diplomatic way of saying that the C.I.O. textile organizers have not been on the job. No further proof of this is necessary when one realizes that in the past 13 months the T.W.U.A. has managed to win only three representation elections conducted in 44 Southern textile companies by the National Labor Relations Board, while workers have voted "no union" 22 times and for the U.T.W.A. (A.F.L.) 19 times. (Since our report last month, two more representation elections have been decided conclusively: Employees of the Old Fort (N. C.) Finishing Division of United Merchants and Manufacturers voted 256 for *"no union"* and 116 for the T.W.U.A.; incidentally, the workers in this plant rejected the U.T.W.A. (A.F.L.) by a similarly overwhelming majority in 1951. In the other election, employees of the nine plants of Fieldcrest Mills at Spray, Leaksville and Draper, N. C., and Fieldale, Va., voted 1,414 for the *T.W.U.A.* and 1,230 for the U.T.W.A.; this was a run-off between the C.I.O. and A.F.L. unions with "no union," which received a low vote in the first election April 7, being eliminated from the second ballot.)

In further respect to T.W.U.A.-C.I.O. personnel, we note that pressure is still being brought to bear by Walter Reuther to have John W. Edelman, sometime Washington representative for the T.W.U.A., appointed Assistant Sec-

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retary of Labor in the Eisenhower Cabinet. It seems only fair that Labor Department officials should be labor men, just as it is logical to have businessmen in the Commerce Department, bankers in the Treasury Department, engineers in the Interior Department, etc. We do, however, balk at the proposed Edelman appointment. Why, in the first place, should the C.I.O. be able to make any claims on the Eisenhower Administration for a place in the government? Secondly, what sense would it make to appoint an acknowledged former Socialist—no matter how anti-Communist he might claim to be—who definitely must be rated as a "Leftist"? On top of it all, this former Socialist is not renowned for telling the truth; witness the folios of fabrications he furnished some months ago to the Senate subcommittee which was investigating the textile labor situation in the South.

While we might naturally be expected to balk at Mr. Edelman being appointed to the Eisenhower Cabinet, we have a feeling that there are quite a few members of the country's "most exclusive club"—the United States Senate—who won't be carried away with the idea. Just why the opposition, which in this case is the C.I.O.-Fair Deal crowd, should demand and expect to receive any favors from the Eisenhower Administration is beyond our comprehension. We are of the same mind as Senator Taft when he was reported to have said "You're Democrats. You worked for the Democrats. The Republicans don't want you coming around now and telling us how to run the government."

Check-off No Longer The Pattern

Time was when bad news relative to union contract provisions resulted from the signing of agreements between the Textile Workers Union of America (C.I.O.) and the managements of large textile manufacturing concerns in northern North Carolina and Virginia.

The present pattern seems to be different. Within recent weeks contracts have been signed by the United Textile Workers of America (A. F.L.) and the respective managements of Dan River Mills at Danville, Va., and Cone Mills Corp. at Greensboro, N. C. The newly-ratified contracts are unusual in that deduction for union dues through the check-off is not provided; at Dan River there is no provision even for allowing dues-collection in the mill. Unions, as we have stated many times, seem to serve no useful purpose in the Southern textile industry, and it is in no sense wishful thinking to predict that absence of the check-off provision in union contracts will weaken the professional union leaders' position in respect to retaining membership.

Elsewhere, we see more light in the sky. The National Labor Relations board, as constituted and operated under the Truman Administration, seems to have had it. Hearings on the Taft-Hartley Law would indicate that Congress is of a mind to tear down the old N.L.R.B. structure and build an altogether new one. The sooner the better, we feel, since the old N.L.R.B. showed such bias in its dealings that it might have been called the "National Labor Redemption Board" or the "National Labor Reward Board."

An order of the N.L.R.B., recently set aside by the Fourth Circuit Court of Appeals at Richmond, Va., is typical. The court entered a unanimous decision reversing the N.L.R.B. order, which had directed Clearwater (S. C.) Finishing Co. to reinstate an employee with back pay and to post a cease and desist notice. The pertinent provisions of the court's order, issued May 1, are:

> . . . The evidence shows that Hutto, an employee in respondent's shop, prevailed upon Livingston, an employee in its office, to furnish him information from the files in the office which he desired to use against respondent in the hearing of the charge which was then pending against it. The board held that the conduct of Livingston in furnishing this information from the company's files was sufficient ground for his discharge. We think that the same was true of the conduct of Hutto, who induced Livingston to furnish it. We find nothing in the evidence to warrant a finding that respondent discharged Hutto for any other reason or that the grounds given for his discharge was not the true one. Hutto was discharged because he had been engaged in improperly abstracting information from the company's private files to use against it. The fact that he intended to use the information in a labor hearing did not justify what he did nor preclude respondent from discharging him for conduct which any employer would have resented whether connected with union activity or not. . . .
>
> As to the questioning of Anderson, it appears that there was no more to this than about a month after the settlement had been agreed upon the personnel officer of respondent made a casual inquiry of an employee as to how a union meeting come out. The meeting was a public one and there was nothing to indicate that respondent was attempting to spy on the union or to intimidate members. This isolated incident furnished no grounds for the finding of an unfair labor practice, particularly in view of the settlement so recently agreed upon by the parties and the posting of notices pursuant to the agreement. . . .

Textiles Are Commercial, Too

During a two-decade period businessmen seldom got anything even resembling a "fair deal" in Washington. But now, with the Eisenhower Administration directing national affairs, numerous businessmen have been taken into the Cabinet as well as into other high positions. From many platforms speakers have reminded the business community that its new voice in national affairs carries with it an obligation, as well as a privilege. This new Washington atmosphere is of substantial interest to us, and if it does, indeed, evolve that business gets a few breaks, we shall be more than pleased.

In this connection, we find very interesting a report coming out of Washington which indicates that the Department of Commerce is considering the establishment of a textile division. Our readers may recall that some years ago there was a fairly effective section or division in the Department of Commerce which dealt with textile matters, but at the outbreak of the Korean War this unit was transferred to the National Production Authority.

Now, it appears that serious thought is being given to moving it from N.P.A. back to Commerce and, if this is done, our industry should do everything possible to see that it is set up properly so that it may render maximum service to the textile industry. At the same time, we should make certain that it is set up economically and that we do not contradict our stated position of urging a frugal and efficient government.

Under the usual routine of doing things in Washington it is customary for various Congressional committees, as well as governmental bureaus and agencies, to consult with secretaries of the various Cabinet departments and their bureau chiefs before proceeding in a given direction. For example, a Congressional committee considering proposed legislation may call before it representatives of the Department of Labor, the Department of Agriculture, the Department of Commerce and others. For many years now there has been

little or no voice in the Federal Government which could be raised before such legislative committees to stress the textile elements of a given problem. Labor was represented by the Department of Labor, and farmers were represented by the Department of Agriculture, but when it came to the Department of Commerce, although there were divisions within it which represented practically every other major American industry, there was no textile unit.

Who's Hurt By Excess Profits Tax?

The liberal element in Washington would have you believe that it is only "big" business which is chafed by the Excess Profits Tax. But, a survey made by the National Association of Manufacturers indicates that E.P.T. takes its heaviest toll from firms which employ fewer than 500 persons.

Of 2,639 companies reporting that they have been subject to the tax, 78.6 per cent were in the category of small companies employing 500 or fewer persons. The largest percentage of surveyed firms paying the excess profits tax was in the 101 to 500-employee group; such companies constituted 43 per cent of those subject to the tax. Companies having a maximum of 50 employees were 16.3 per cent of E.P.T.-paying respondents in the survey, and companies having from 51 to 100 employees made up 19.3 per cent of those paying the tax.

In the questionnaire which the N.A.M. sent to member companies, business leaders were asked to describe their experiences with the tax. Some 1,500 firms responded to this part of the questionnaire. The replies revealed a pattern of plans for expansion scrapped by lack of funds (due to the excess profits tax), of present and future jobs killed of blows to community prosperity, of waste and higher costs, of new products abandoned, of enforced and unsound borrowing, and of losses of benefits to employees.

Following are some typical reports from businessmen on the effects of the excess profits tax:

"Being a small firm, just beginning to rapidly increase sales, the holding of our profits to 85 per cent of net profit for years 1947, 1948 and 1949 takes away all incentive for expansion or increased effort."

"They (taxes) have not only unfairly reduced the return to the stockholders on their investment but have also limited the benefits, monetary and otherwise, for employees."

"Due to excess profits tax we find it almost impossible to plan for any expansion of plant and therefore we cannot increase our employment. We could make some much-needed improvements in our operations that would increase our payroll at least 35 per cent if the money that is paid out in excess profits tax could be used for plant expansion."

In concluding his address to the recent American Cotton Manufacturers Institute convention, Charles R. Sligh Jr., president of the N.A.M., asked his audience to fill out cards listing the three most important things the Administration and Congress should be dealing with at the present time. The cards filled out by his listeners at Palm Beach, along with some 5,000 others collected when he appeared elsewhere, are being presented this month by Mr. Sligh to President Eisenhower, upon the President's request. We expect that the N.A.M.-Sligh list will read as follows: (1) do away with unnecessary spending; (2) balance the federal budget; and (3) reduce taxes as soon as possible. A fourth item which we would add for the President's consideration would be "Run your Administration as you think best; you were elected by a majority of the citizens who obviously wanted a conservative government, so give it to them in a clear-cut fashion."

TEXTILE INDUSTRY SCHEDULE

— 1953 —

June 12-13—**PIEDMONT SECTION**, A.A.T.C.C., Mayview Manor, Blowing Rock, N. C.

June 17-19—**AMERICAN MANAGEMENT ASSOCIATION CONFERENCE ON GENERAL MANAGEMENT**, Hotel Statler, New York City.

June 18-20—Annual convention, **SOUTHERN TEXTILE ASSOCIATION**, Mayview Manor, Blowing Rock, N. C.

June 19-20—Annual outing, **SOUTHEASTERN SECTION**, A.A.T.C.C., Radium Springs, Ga.

June 25-27—**AMERICAN COTTON CONGRESS**, Caprock Hotel, Lubbock, Tex.

June 29-July 3—Annual meeting, **AMERICAN SOCIETY FOR TESTING MATERIALS**, Chalfonte-Haddon Hall, Atlantic City, N. J.

Aug. 21-22—Outing, **SOUTH CENTRAL SECTION**, A.A.T.C.C., Chattanooga (Tenn.) Golf and Country Club.

Sept. 10-11—Fall meeting, **THE FIBER SOCIETY**, Lowell, Mass.

Sept. 12—**PIEDMONT SECTION**, A.A.T.C.C., Hotel Charlotte, Charlotte, N. C.

Sept. 17-19—National convention, **AMERICAN ASSOCIATION OF TEXTILE CHEMISTS AND COLORISTS**, Conrad Hilton Hotel, Chicago, Ill.

Sept. 18—Annual meeting, **SOUTHERN COMBED YARN SPINNERS ASSOCIATION**, Charlotte (N. C.) Hotel.

Sept. 19—**NORTHERN NORTH CAROLINA-VIRGINIA DIVISION**, S.T.A., Hylton Hall, Danville, Va.

Oct. 1-2—Annual convention, **QUARTERMASTER ASSOCIATION**, Lord Baltimore Hotel, Baltimore, Md.

Oct. 14-24—**INTERNATIONAL EXHIBITION OF TEXTILE MACHINERY AND ACCESSORIES**, Belle Vue, Manchester, England.

Oct. 15-16—Annual meeting, **NORTH CAROLINA TEXTILE MANUFACTURERS ASSOCIATION**, The Carolina, Pinehurst, N. C.

Oct. 29-30—Annual convention, **CARDED YARN ASSOCIATION**, Grove Park Inn, Asheville, N. C.

Nov. 5-7—Conference of **TEXTILE DIVISION, GEORGIA, TENNESSEE, BIRMINGHAM & HUNTSVILLE SECTIONS, AMERICAN SOCIETY FOR QUALITY CONTROL**, Chattanooga, Tenn.

Nov. 12-13—Annual meeting, **TEXTILE RESEARCH INSTITUTE**, New York City.

Dec. 5—**SOUTH CENTRAL SECTION**, A.A.T.C.C., Hotel Patten, Chattanooga, Tenn.

— 1954 —

Feb. 17-19—**COTTON RESEARCH CLINIC**, sponsored by National Cotton Council of America, The Carolina, Pinehurst, N. C.

Feb. 25-27—Annual convention, **PHI PSI TEXTILE FRATERNITY**, The Carolina, Pinehurst, N. C.

April 22-24—Annual convention, **AMERICAN COTTON MANUFACTURERS INSTITUTE**, Jung Hotel, New Orleans, La.

April 26-May 1—**AMERICAN TEXTILE MACHINERY EXHIBITION**, Atlantic City (N. J.) Auditorium.

June 10-12—Annual convention, **S.T.A.**, Ocean Forest Hotel, Myrtle Beach, S. C.

Sept. 15-18—National convention, **A.A.T.C.C.**, Atlanta Biltmore Hotel, Atlanta, Ga.

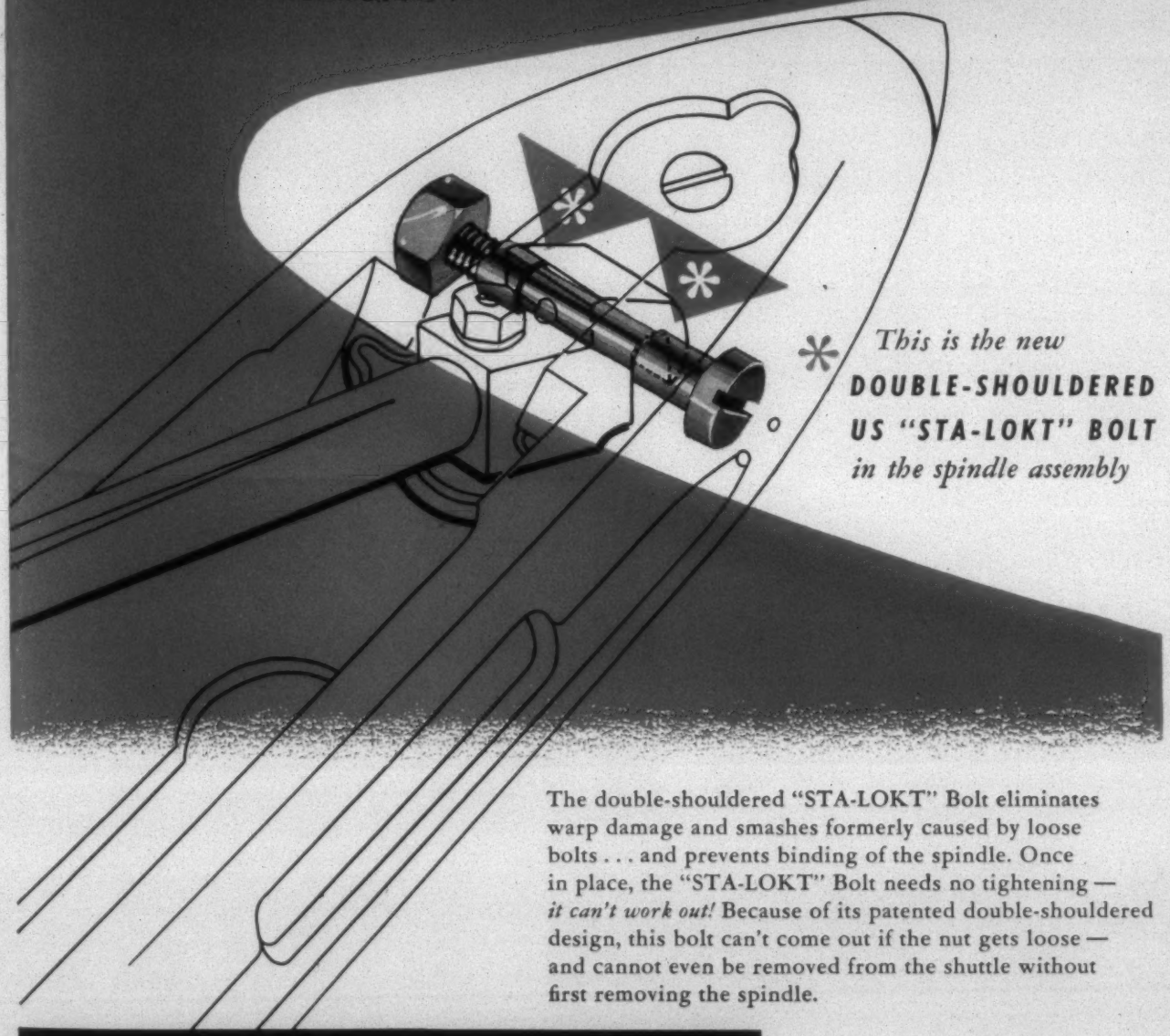
Oct. 4-9—**SOUTHERN TEXTILE EXPOSITION**, Textile Hall, Greenville, S. C.

— 1955 —

Sept. 21-23—National convention, **A.A.T.C.C.**, Chalfonte-Haddon Hall, Atlantic City, N. J.

It's US patented

so no other shuttle has it!



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The double-shouldered "STA-LOKT" Bolt eliminates warp damage and smashes formerly caused by loose bolts . . . and prevents binding of the spindle. Once in place, the "STA-LOKT" Bolt needs no tightening — *it can't work out!* Because of its patented double-shouldered design, this bolt can't come out if the nut gets loose — and cannot even be removed from the shuttle without first removing the spindle.

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PHILADELPHIA, PA. PROVIDENCE, R. I. MINNEAPOLIS, MINN.
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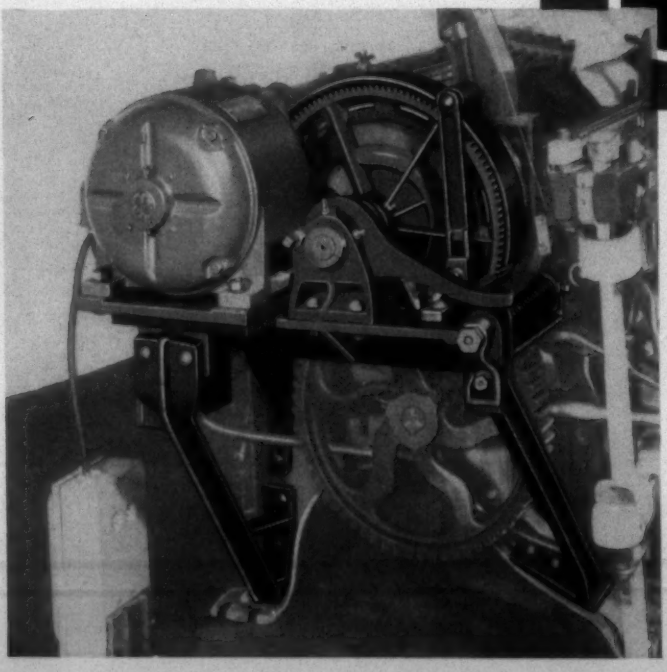
a motor drive that gives maximum pulling power with minimum tension . . . and positively keeps grease from the clutch.

MAJOR DRAWBACKS OF OTHER LOOM DRIVES ARE ELIMINATED WITH BAHAN'S MODEL D1*

In the Model D1*, Bahan has overcome the disadvantages of previous drives. By a new method of grease lubrication and control, grease always travels to the proper points; individual grease channels prevent grease by-passing of bearing point. The general problem of slippage is eliminated by sealing grease from the clutch. By the absence of grease on the driving clutch the required tension is decreased, as compared to other drives. This in turn increases bearing life and decreases the amount of adjustment necessary to maintain efficient operation.

**Patent Pending*



The Most

Here is proven performance after months of grueling tests . . . the result of years of study, planning and experimentation. This Model D1* Drive will absolutely eliminate grease troubles and assure uniform loom speeds.

This new Bahan motor drive is practically trouble-free. Its construction reduces the amount of adjustment required by 80% as compared with loom drives of the past.

In Bahan's new MODEL D1* DRIVE it is impossible for grease to spill or leak through to

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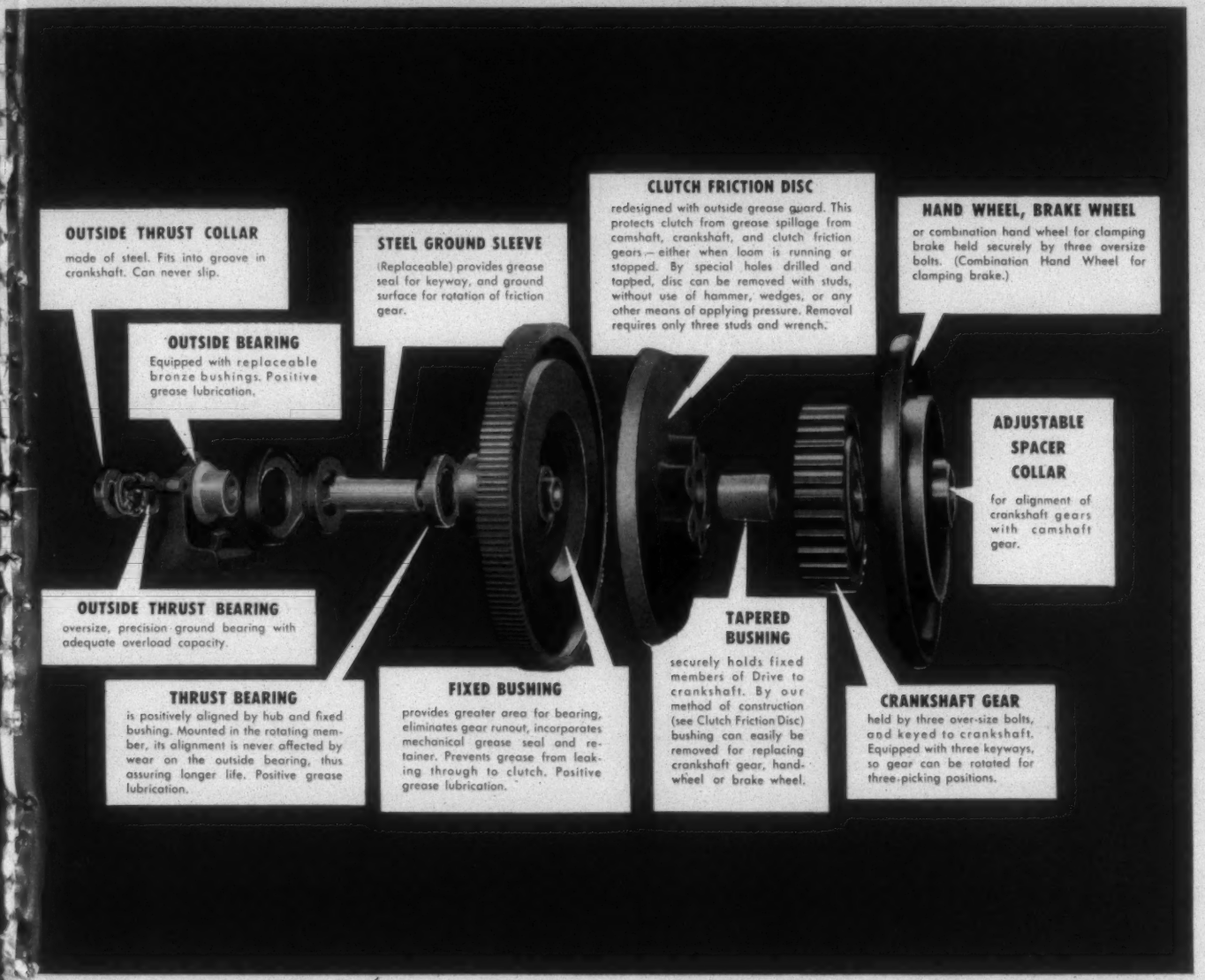

Dependable Loom Driving Unit Ever Designed!

the cork clutch or to the clutch friction disc. Hence there is no slipping, and no loss of power efficiency.

The Model D1* Drive, because of its construction, reduces the required amount of tension for operation. This is reflected in uniform loom speeds and greatly increased life of all its parts.

This MODEL D1* DRIVE is so made that there will never be danger of grease failing to reach some working part. There is POSITIVE GREASE LUBRICATION for every part which needs grease.

BAHAN MODEL D1* DRIVES are now available for E-Model, K-Model, and Modified D-Model looms; and they can be adapted for various other models of looms.

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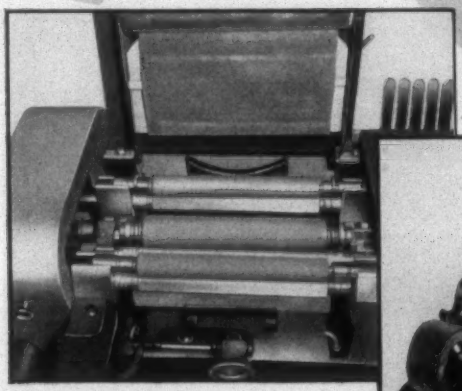
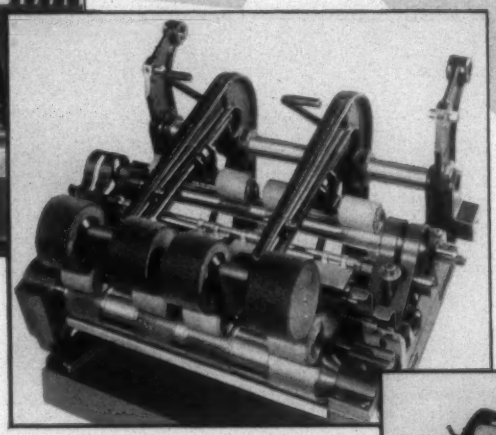
3 OVER 4 DRAWING FRAME

THE F-5 ROVING FRAME

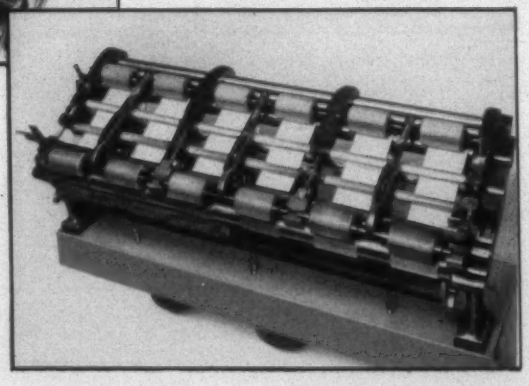
THE Z-5 SPINNING FRAME

FOR PRODUCING HIGHER QUALITY LONG STAPLE SYNTHETIC YARN AT LOWER COST





DURING 1953 MORE THAN 162 MILLION POUNDS OF LONG STAPLE SYNTHETIC YARN IS SCHEDULED FOR PRODUCTION AND DISTRIBUTION



This Saco-Lowell Task Force for synthetics, 3 over 4 Drawing, F-5 Roving and Z-5 Spinning is flexible in adjustment, rugged in construction, easily understood and adaptable as change-overs to existing equipment.

This Saco-Lowell "Task Force" is a modern, specialized and flexible straight line unit which has demonstrated unusual operating efficiency in both laboratory and mill. Roll settings, coverings and pressures are easily adjusted to process simple and complex blends of natural and synthetic fibres in a wide range of staple lengths and deniers.

Any mill working with synthetics will find it worthwhile and interesting to discuss the "Task Force" with Saco-Lowell engineers.

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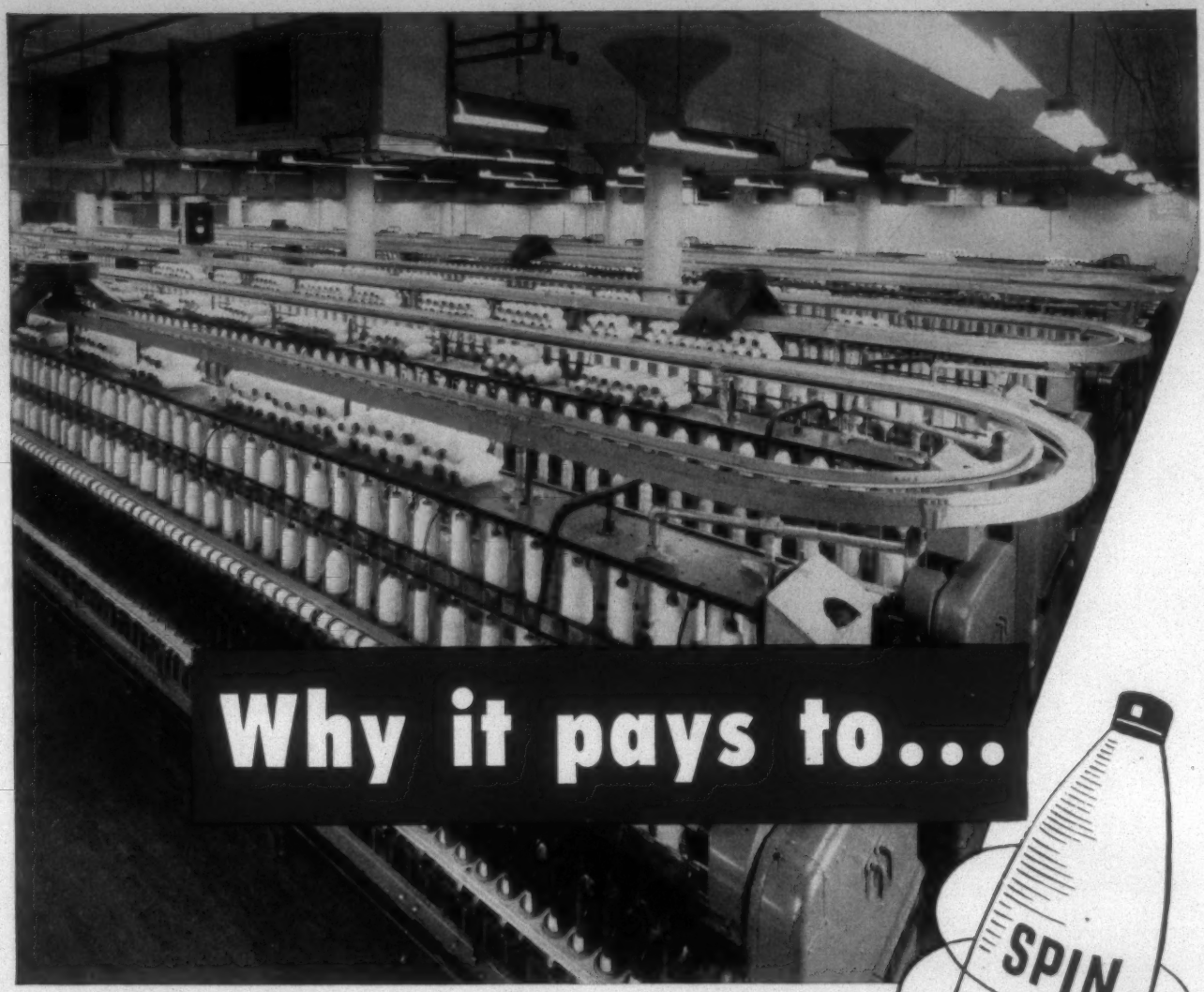

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Texaco Spindura Oil has extra resistance to oxidation, thickening and gumming. It eliminates starting and running drag, assuring full-speed operation with heavy packages, less power consumption. Also, *Texaco Spindura Oil* will not atomize or fog. Yarn comes through cleaner.

There is a complete line of *Texaco Spindura Oils* to meet all spindle manufacturers' requirements for effective lubrication of spinning, throwing, spooling and twisting spindles.

Two other products it pays to use: *Texaco Regal Starfak* for longer lasting protection of high-speed antifriction bearings; and *Texaco Texspray Compound,* the fibre conditioner that assures smoother, stronger, more uniform yarn.

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FOR THE TEXTILE INDUSTRY

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textile bulletin

VOL. 79 MAY 1953 NO. 5

Hallett Strikes Optimistic Note At Alabama Meeting

THE textile industry now has shaken off effects of the 1952-52 depression, and the favorable readjustments which have occurred "did not have the benefit of artificial stimulus," H. K. Hallett of Charlotte, N. C., president of the American Cotton Manufacturers Institute, told members of the Alabama Cotton Manufacturers Association which met April 9-11 at Biloxi, Miss. The industry has "moved upward despite a tendency to deflation and despite the handicap of weakness and much confusion in the raw cotton market," Mr. Hallett told the 52nd anniversary meeting of the Alabama association.

The newly-elected A.C.M.I. head declared that the textile industry's foundations "are not likely to be shaken within the foreseeable future by anything less than a recession in our general economy." The current improvement is all the more satisfying, he added, because it has occurred despite some adverse developments. These included large losses in production of cotton tire cord and fabric, losses in production of cotton bag fabrics due to heavy imports of burlap from India last year, and a drop in the output of cotton duck as a result of diminished government procurement.

"Notwithstanding these setbacks," Mr. Hallet asserted, "the total production of cotton broad-woven goods during the fourth quarter of 1952 was nine per cent above the preceding quarter and ten per cent above the last quarter of 1951." The industry today, he said, is finding lighter fabrics of increased importance in the total production picture. However, he added, "there is reason to believe that cotton consumption will make a much better showing in the last five months of the year than it did a year ago."

Joe L. Jennings, executive vice-president of West Point Mfg. Co., Lanett, Ala., retiring president of the association, enumerated some of the public relations activities of the association which he said had been found effective and helpful. Mr. Jennings described the group's public relations program as a vigorous, many-sided and continuous one which has attracted industrywide attention.

Concerning the new Administration, Mr. Jennings urged patience and understanding and told members of the association not to expect too much over night from the new Administration at Washington. "I am happy that I do not have to view with alarm the prospects for punitive legislation and the unfriendly interpretation and admnistration of regulations in Washington. For 20 years, business was the scapegoat, but now we are blessed with a new viewpoint which is friendly and understanding."

Mr. Jennings also stressed the high ideals of textile industry leaders, pointing up this impression when he stated: "While many of us are competitors, we are aware of the bigger fact that we have more to co-operate about than to compete over."

The retiring president then added: "Working together in this association, we are pooling our efforts and ideas so as to do our bit in strengthing the forces of freedom by strengthening our industry and by so doing, our economy, and in doing that we add strength to this nation of free men and women.

"A healthy economic system is essential to freedom and our economic system cannot be healthy unless groups such as ours learn that the great goal of life is to rise above the law of the jungle and lift the life of man higher economically, socially and morally."

Guest speaker for the convention, and in the opinion of those in attendance a happy choice for the event, was Secretary of Commerce Sinclair Weeks who won the attention and friendship of his audience with his pertinent remarks and wry sense of humor. Revealing that he was a former director of West Point Mfg. Co., Mr. Weeks smilingly remarked "It's a great company, though not as

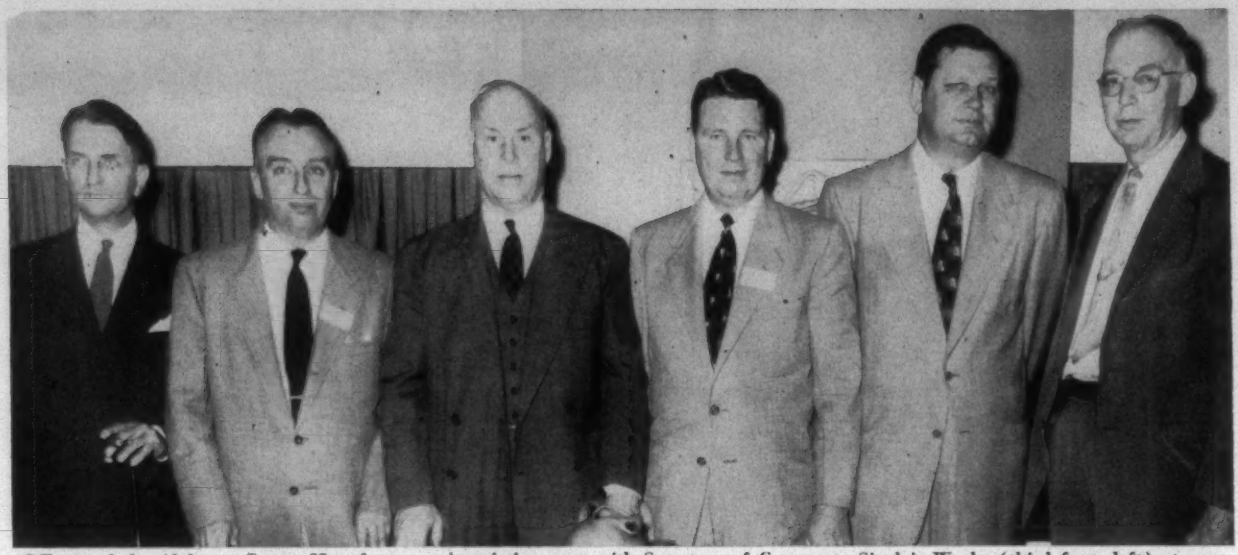
Alabama Association Officials

T. P. Roberts, treasurer of Adelaide Mills, Anniston, Ala., was elected president of the Alabama Cotton Manufacturers Association at the closing session of the group's 52nd anniversary convention held at the Buena Vista Hotel in Biloxi, Miss. Mr. Roberts succeeds Joe L. Jennings, executive vice-president of West Point Mfg. Co., Lanett, Ala., who becomes chairman of the association's board.

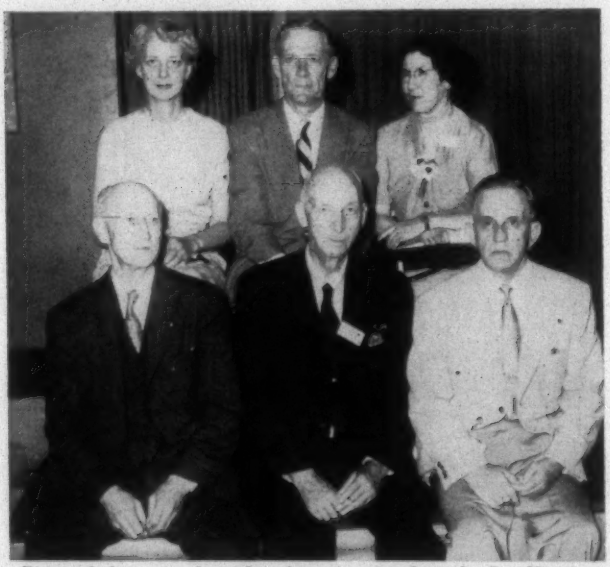
Homer Carter, manager of Pepperell (Ala.) Mfg. Co., read the report of the nominating committee, pinch-hitting for Tom Russell of Russell Mfg. Co., Alexander City, who had to leave before the convention was over.

T. Holmes Floyd of Opelika (Ala.) Mfg. Corp. was elected vice-president, having been advanced from the office of treasurer. Dwight M. Wilhelm was re-elected executive vice-president. The new treasurer is Fred Phillips of the Buck Creek Cotton Mills, Siluria.

New directors for three-year terms ending in 1956 are: W. Page Enloe Jr. of W. A. Handley Mfg. Co., Roanoke, Ala.; Joe Johnson of Geneva (Ala.) Cotton Mills and Erwin R. Lehmann of West Point Mfg. Co., Langdale, Ala. F. M. Lyon of Opp (Ala.) Cotton Mills was elected to the board to replace a retirement.



Officers of the Alabama Cotton Manufacturers Association pose with Secretary of Commerce Sinclair Weeks (third from left) at conclusion of the convention. *Left to right:* Dwight Wilhelm, executive vice-president; Joe L. Jennings, retiring president and new chairman of the board; Mr. Weeks; Hamp Morris III, retiring board chairman; T. P. Roberts, newly-elected president; and T. Holmes Floyd, newly-elected vice-president.



Pictured above are the judges for prize awards at the Gay Nineties Ball held during the Alabama Cotton Manufacturers Association convention. In order for the reader to get some satisfaction after he tries and fails to identify the group *below*, it is suggested that the reader identify the judges for himself.

great as it was (when I was a director)." Then added: "However, I did not sell all of my stock."

In a more serious vein, Secretary Weeks told the Alabama manufacturers that businessmen who sincerely believe in government economy should practice what they preach when it comes to special legislation. He said that "businessmen who talked about economy in principle and then acted through their lobbies for special benefits are often to blame for a share of the high cost of government."

He urged members of the association not to lobby for special benefits from government. This would help reduce government spending, he said. Further, he declared, "We are getting government out of competition with private industry—and we are urging management and labor to settle their problems around their own conference table." He added that unnecessary items were being eliminated from the federal budget so that in time there might be a balanced budget and a reduction in taxes.

"I am sure that American business and American labor are supporting our attempts to eliminate waste from government expenditures," Mr. Weeks said.

However, he emphasized that "every penny cut from an estimate always arouses the complaits of the particular per-

When thinking of the little bill don't forget

The BIG Bill!

This shouldn't happen . . . but it does. When planning a maintenance painting job, more time, more thought, more words are spent on the *cost* of the paint . . . *which is wrong*. On the average, paint represents only 20% of the total cost of the job. *Labor* represents 80%. And always, the quality of the paint you buy has a direct bearing on what you save or lose on labor.

Use Barreled Sunlight and you'll *save* more on labor. True, Barreled Sunlight's proved ability to take more thinner offsets the few extra pennies you might have to pay for the paint itself. But of even greater importance, Barreled Sunlight's ease of application . . . its faster flow, its greater coverage per stroke, its better hiding power, its extra "yardage" per gallon . . . all add up to savings, *big* savings in labor, *big* savings on the total cost.

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son, group or geographical area touched." It will not be of much avail for conscientious government officials to recommend savings if pressure groups try to have the eliminated items put back in the budget, he stated.

In spite of the temporary setback, the textile industry has been in the forefront of a general economic advance throughout the South, Mr. Hallett, the A.C.M.I. president said. In addition, textile progress is linked closely with "the progress of dozens of other businesses and industries which are dependent—some of them very dependent—on textiles for their well-being." There is no reason, then, he said, to doubt that the textile industry will not keep pace in the future with this region's economic expansion.

But, he warned, "to assure our well-being, it seems to me that we must continue to exercise good judgment, resourcefulness and ingenuity—and we must do more. There is no doubt in my mind that if for no other reason, the great change in the national political scene requires us to widen our vision to an awareness of our individual responsibilities to social and economic progress."

He said these responsibilities go beyond the textile industry itself and that they represent obligations "to a society of which we are a basic part." That society is now asking that textile management take full and proper care of its part of the economy. He lauded Alabama textile management for what it had already done in meeting its responsibilities as recently revealed by an association survey among mills in that state.

"It was brought home to me," he stated, "that you have undertaken many projects as an obligation of good citizenship. It is a recognition on your part of the need by this industry and all American industry to create greater wealth in human values."

But, he told the convention, there are economic obligations too. "These entail," he continued, "the passing of a fair share of the benefits of modernization and increased efficiency along to the consumers; a fair share to our employees and a fair share as well to our stockholders. The size of the portions passed along to each of these groups will grow as we are able to make more and better products at a lower cost. For any of these groups to oppose technological improvements which make possible more and better products at lower cost, is to oppose their own best interests.

"Production of better goods in greater volume and at lower costs," he pointed out, "will not only result in a larger share of the benefits of efficiency for all concerned; it will also enable the textile industry to stand on more solid ground in competition with other industries for consumer dollars."

Mr. Hallett emphasized the growing application of research to all branches of the textile industry and how it was helping expand markets. "What we see ahead in the long-range future, then," he told the textile men, their suppliers and other guests, "is an optimistic picture, a challenging picture. For the younger people in particular, it is a picture of opportunity, exciting the imagination. No wonder people call this industry glamorous and romantic, when you stop to think of the many new developments taking place in it right now."

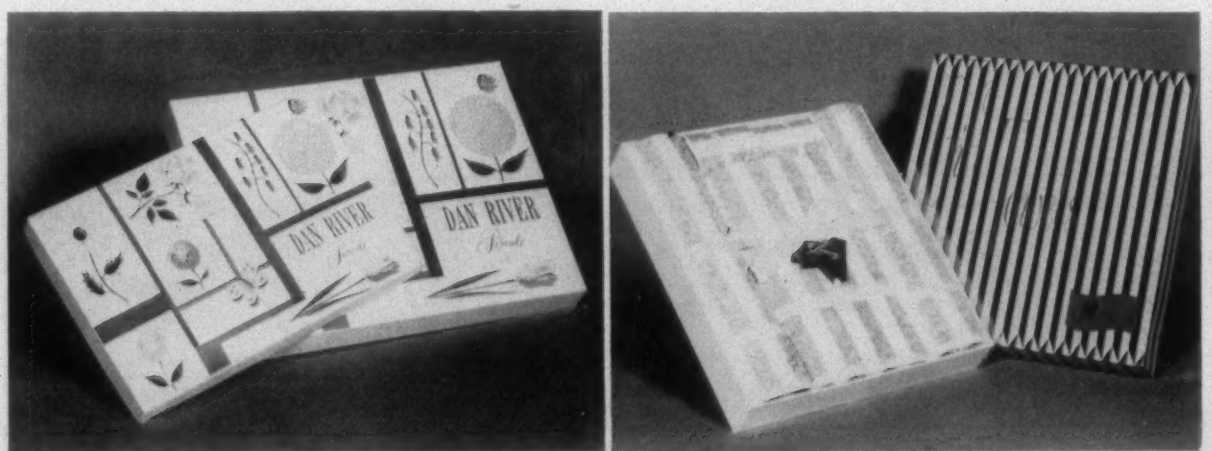
Rupert L. Murphy, head of the Georgia-Alabama Traffic Association, reporting for the A.C.M.A. traffic committee, told the meeting that the textile industry is still in the danger zone with regard to the maneuvers of the railroads for changes in the uniform class rate and classification.

"The uniform class rate and classification of the rail carriers has been partially effected, but textiles have not yet been reached. In my opinion there is great danger in the effect it will have on textiles, and will require careful study and handling if a reasonable level is to be maintained, and relationships between products and manufacturers are not disturbed," Mr. Murphy said.

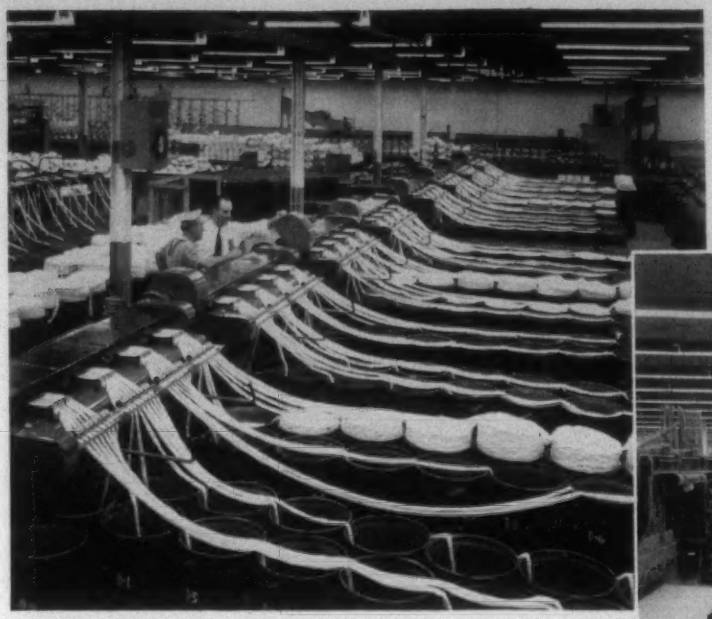
Reporting for the cotton improvement committee, Craig Smith, president of Avondale Mills, Sylacauga, Ala., stated that the association's cotton improvement program has been instrumental in adding $13,000,000 of the cotton farm income in Alabama during the past year.

"There are many of us who can remember vividly when Alabama's cotton crop was seven-eighths inch staple and shorter," Mr. Smith declared. "This year it was almost entirely inch staple and longer."

The convention entertainment menu featured a Gay Nineties Cabaret, cruises on the bay, and a golf tournament.



AWARD WINNERS IN THE ANNUAL SET-UP PAPER BOX COMPETITION, announced at the 35th annual convention of the National Paper Box Manufacturers Association in Boston, Mass., May 17-20, were the two packages above designed and manufactured by Old Dominion Box Co. of Charlotte, N. C. *At left* is a sheet and pillowcase gift set made for Dan River Mills which won honorable mention in textiles for general superiority according to end-use and second award in the "best surface design and execution" category. *At right* is a gift box for Martex towels, made for Fairfax Mills Inc., winner of first award in textiles for general superiority according to end-use and first award for best surface design and execution.



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So even if you don't see the gleaming ductwork and efficient Bahnson distribution grilles at first glance, you see and feel the **results** the moment you enter the rooms.

Hidden away overhead are the eight Bahnson Centrispray Washers that breathe life to those ducts . . . and hidden away in the office is an operating expense record that will soon show cost figures to prove, beyond all doubt, that this plant produces more cloth, and higher quality cloth, at lower unit cost.

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To learn more about Bahnson Textile Air Conditioning Systems, ask to have an engineer call, or write for a copy of our latest Catalog, 22A.

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American Cotton Manufacturers Institute President

Accomplished, Congenial, Meticulous Industry Personality

Cameraman captures H. K. Hallett in various moods of expression as he discusses current trade topics in his Kendall Mills office.

"The reciprocity . . . has never happened." . . . "That . . . nuisance, the Walsh-Healey Act, needs to be rescinded." . . . "My best day's work—June 19, 1918." . . . "The nation is looking to us to . . . solve our own problems."

By D. McK. CLARK

FOR A MAN who thought, the first time he saw the cotton plant growing in the fields, "My, they grow lots of potatoes down here," Howell Knight Hallett has come a long way. He has come, in fact, all the way to the top of the industry that takes what he once thought was potatoes and makes it into items just as necessary to human existence as the well-known spud.

It was a logical mistake for H. K. Hallett to make, for he was born a Yankee in Reading, Mass., and the occasion for his original misidentification of King Cotton was his first trip to the South in 1914. He was on his way to a new job in the textile industry, an industry he was to serve faithfully and diligently through the years, and an industry which was to honor and, at the same time, burden him, with its highest post in 1953—the presidency of the American Cotton Manufacturers Institute.

But for those who knew the man, Mr. Hallett's arrival at the top came as no surprise, for in every position he has ever held he has combined an organizing genius with meticulous attention to detail to get the job done with a minimum of confusion and a maximum of efficiency. He is a man who is always literally two jumps ahead of any situation that might arise. Business associates, when talking of the man they affectionately call "H. K.," never fail to point out that he seems always to anticipate any situation that might arise, plan for it, solve it, and have it out of the way before it ever appears. And, on top of all that, he works hard, harder than any one else at the office. One of his business associates pointed out that he is always at the office at least half an hour before anyone else.

There are men, however, who combine the qualities of hard work, foresight, attention to detail, and organization, but who never seem to quite reach the top. Backslapping, hail-fellows-well-met of less ability seem to pass them by. Fortunately, for the A.C.M.I. and the textile industry in general, such is not the case with H. K. Hallett, for though, as someone close to him put it, "H. K. is business, business, business," he is also one of the best mixers and most congenial companions in the industry. As Mrs. Hallett said, "H. K. loves nothing better than to have a crowd in and cook steaks for them out in the back yard."

And while the new president charms his family and his friends, he also evidently inspires a love and loyalty at the office, for during the March meeting of the A.C.M.I. at Palm Beach, when he was elected to head the group, he received from members of his Kendall Mills staff a scroll into which was woven a message wishing him good luck and containing the names of 56 of the people who work around him.

Many of Mr. Hallett's friends are frank to tell him, "H. K., the best day's work you ever did was the day you married your wife," and he is quick to agree. That "best day's work" was June 19, 1918, to be exact, when H. K. Hallett wed Laura Jean Lindsay of Camden, S. C. But if Mr. Hallett's chest swells with pride when her name is mentioned, the feeling is mutual, for, she says, even in their courtship days, "He was wonderful—the best damyankee in the country." Speaking of damyankees, Mrs. Hallett reports that "H. K. is a real Southerner now. We go North and he's always so glad to get back to North Carolina."

The Halletts have two children: Mrs. George I. Ray Jr. (Katherine Knight Hallett), of Charlotte, and John Lindsay Hallett, with Springs Cotton Mills in Fort Mill, S. C.

Mrs. Hallett reports that her husband is "wonderful in anything around the house—taking off doors and fitting them properly, for example—but I can't get him especially interested in gardening which is my hobby." Mr. Hallett's hobby is "learning and having fun" in his wood-working shop. "I have a lot of fun," he laughs, "when Mrs. Hallett doesn't make me repair things." Mr. Hallett also has a Realist three-dimensional camera and he reports that the pictures he got of Mrs. Hallett's garden this Spring were beautiful.

Textiles first took hold of H. K. Hallett while he was still in high school. While playing baseball for some of the New England mill teams, he began looking inside the mills on rainy afternoons to see just what made thinks tick. Thus it was only natural that when he graduated from Dartmouth in 1914 (where, incidentally, he had pitched a no-hit, no-run victory over West Point) he chose to go into the textile business. He began his work in the South with the Langley (S. C.) Mills. In 1915 he went on the road erecting looms for Draper Corp. The next year he became overseer of carding in the Hickman Mill of Graniteville (S. C.) Mfg. Co., in Graniteville, S. C., and in 1917, Henry P. Kendall chose him as superintendent of the Wateree Mill in Camden, S. C. Needless to say, his rise with Kendall Mills was rapid, and in 1928 he was made general manager of the Kendall Mills Division of the Kendall Co., in charge of gray goods operations.

Today, H. K. Hallett has under his direct supervision the Thrift Plant at Paw Creek, N. C.; the Wateree Plant at Camden, S. C.; the Addison Plant at Edgefield, S. C.; the Mollohon and Oakland Plants at Newberry, S. C.; and the Pelzer (S. C.) Mills. Thus, he is directly responsible for the operation of some 296,500 spindles and 6,850 looms. He is now vice-president of Kendall Mills, Cotton Mill Division; a director of The Kendall Co., Boston, Mass.; and president of Pelzer Mills.

As spokesman for the nation's cotton manufacturers, H. K. Hallett has already demonstrated in his public speeches a willingness to lead his fellow manufacturers in taking a stand on issues vital to the industry. While he admits feeling that in an industry as large as cotton manufacturing there will be many differences of opinion,

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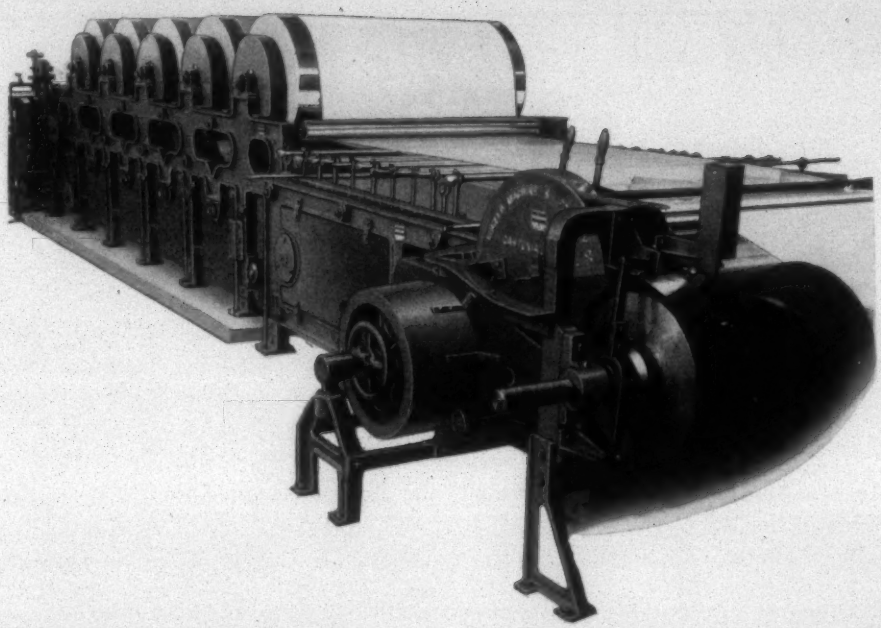

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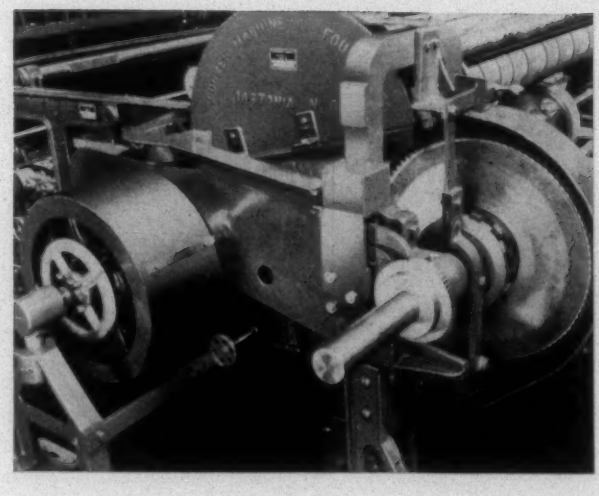

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he feels that in the matter of foreign trade and the interpretation of the "Trade—not aid" slogan, the textile industry should stand together in opposing a lowering of tariffs at this time.

He feels, too, that there are many other questions on which mills in all parts of the country can work together. He points out that one of the country's greatest needs is a more stabilized economy, and that this must be brought about through a reduction in non-essential spending and a balancing of the federal budget. At the proper time, he believes that rates of taxation should be lowered in order that the expansion of private business may be stimulated, providing more jobs for an increasing population. As other problems of mutual interest, he mentions the promotion of the consumption of textile products at home and abroad, and a closer working relationship between all segments of the textile industry.

He is optimistic about the future of textiles. He pointed out in a recent speech that there is no reason to doubt that the textile industry will not keep pace in the future with this region's expansion. But he is also calling on the industry to meet all of its social and economic obligations because "The nation is looking to us to see whether we can solve our own problems, or whether we must turn them over to a bigger and bigger government. I believe, in meeting this challenge, we can be an industry which can use the word 'we' in expressing our points of view."

Georgia Mill Men Hear Call For Fairer Tax Policies

PRESENT depreciation allowances for tax purposes are making it impossible for the nation to achieve maximum economic stability, Robert C. Jackson, executive vice-president of the American Cotton Manufacturers Institute, stated in an address before the 53rd annual convention of the Cotton Manufacturers Association of Georgia held April 23-25 at Boca Raton, Fla. More than 500 textile mill executives and suppliers were in attendance at the event.

"Economic progress in America is related directly to its program of continued expansion," Mr. Jackson declared. "From the day the Constitution of the United States came into being, this country has never stood still for long. The economic strength of our nation comes from its ability to grow, to pioneer, to develop something new, to provide more and better things for more people.

"Nothing can more surely stop this growth than too big government and its inevitable counterpart—paralyzing taxation. Not only does such taxation destroy initiative, incentive and enterprise, but it breeds fear, indecision and indifference." Jackson said that such taxation also "gives plausibility to the charge that our country can be 'threatened' by peace, that the United States cannot prosper without war, that our system cannot be sustained without the inflationary stimulus of continued huge expenditures for national defense."

The A.C.M.I. executive told the textile executives, their suppliers and guests that "No one can be complacent about a situation which so clearly strikes at the very foundation of our economic system." He warned that "irresponsible spending and excessive taxation" must be reduced at all levels of government.

In his address as retiring president of the Cotton Manufacturers Association of Georgia, J. M. Cheatham, president of Dundee Mills, Griffin, Ga., told the gathering that the textile industry, despite the recession of the past 12 months, is in excellent shape, both mechanically and financially, and well prepared to withstand the results that might come from any quarter. Mr. Cheatham expressed faith in the ability of American business and industry to "resolve our problems in a manner that will bring credit to the fine heritage with which we have been so richly endowed."

One of the most vital problems which the textile industry is concerned with is the age-old problem of tariffs, Mr. Cheatham declared. The controversy over how high they should be comes up every year and now it is proposed that tariffs be eliminated and that we get down to a free trade basis with the rest of the world.

He cited the foreign trade report made by Charles C. Hertwig, Bibb Mfg. Co., Macon, Ga., and a past president of the Georgia association, at the annual A.C.M.I. convention this year, that foreign countries pledged themselves to lower tariffs and such reductions were promptly nullified by import quotas, exchange restrictions and embargoes. Mr. Hertwig further pointed out that areas of most extreme restrictions are the ones which have profited most from American trade policy.

President Eisenhower's proposal to extend the Trade Agreements Act for one year, to allow a study to be made, was hailed as "encouraging" by Mr. Cheatham, who urged the Georgia cotton manufacturers not to relax their efforts in seeing this through to a satisfactory conclusion.

"Whatever issue tomorrow might bring, we have the knowledge that it is nothing fundamentally new—we've had it before—we've gained the victory and we can do it again," he averred. "When I reflect on the trying periods our industry has endured and the heart-sickening situations that our fathers have faced many times, then I am ashamed to complain or to become discouraged over the turn of events," Mr. Cheatham told the convention.

Frank S. Twitty, floor leader of the Georgia House of Representatives, assured the textile executives that despite recommendations to the contrary, the next session of the Georgia Legislature is not likely to make any "radical" changes in the Workmen's Compensation Law. He blasted a bill introduced at the last session of the Legislature and said it would have increased benefit payments "to such an extent that insurance premiums would have been prohibitive."

Deploring the lowering of the Universal Cotton Standards, the cotton buyers division of the Cotton Manufacturers Association of Georgia recommended that the government give American mills a voice in setting cotton standards. Frank Carter, secretary, give the report for the association divisions which include the cotton buyers division; office executives division and personnel managers division.

Cotton buyers are confronted with such standing problems as tar spots, over-drying, over-ginning, over-heating and over-machining at the gin and faulty packing, Mr. Carter declared.

Recommendations made by this division were noted by the official. They included: (1) Continuation of efforts to determine and eliminate causes of tar spots. The National Cotton Council will continue its educational program and other work in this direction, he said. (2) That ginners' as-

sociations be urged to continue efforts to solve problems of over-drying, over-ginning, over-heating and over-machining. Cotton fiber continues to be damaged by cleaning methods employed at the gins, detracting from splendid work being done by private breeders and the Department of Agriculture to improve fiber qualities.

Both railroads and motor carriers have petitions now pending that would increase freight rates on textile products and materials, including a temporary 15 per cent general increase that the railroads are seeking to have made permanent, R. L. Murphy, traffic manager of the Georgia-Alabama Textile Traffic Association, reported to the convention. These increases are being vigorously opposed by the association, Mr. Murphy told the mill men.

Most recent of the proposed increases now pending is one of the motor carriers to increase rates by 100 per cent on towels, terry, tufted or similar materials. The association is opposing the recent petition of rail carriers to make the 15 per cent temporary increase permanent, and has asked that the Feb. 28, 1954, expiration date be observed.

A textbook on industrial relations has been written and is now being edited for publication, B. W. Whorton, Dixie Mills Inc., LaGrange, made known in his report on the technical education committee. The text includes a history of Georgia's textile industry and its industrial relations.

The association's agricultural committee is progressing in its efforts to bring about a closer relationship between cotton growers and mills, Paul McKenney Jr., Swift Mfg. Co., Columbus, told the association.

The public relations committee has continued to tell the story of Georgia mills to the people of the state, emphasizing the progress being made in textiles throgh research and development, Alvin S. Davis, Callaway Mills Co., LaGrange, chairman, reported.

As a result of its annual safety contest, Georgia mills now have a lower average of accident frequency and severity than the national average, George Hightower, Thomaston Mills, chairman of this committee, made known. Mr. Hightower made known winners in the contest just ended, reporting that 114 Georgia mills are participating in the 1953-1954 contest.

Industry's contribution toward building better business, better jobs and better communities, Mr. Jackson, the A.C.M.I. executive vice-president said, can be greater efficiency and economy through better research and speedier adoption of better technological methods. "Here the government,

Georgia Association Officials

R. Houston Jewell, vice-president of Crystal Springs Bleachery, Chickamauga, Ga., was elected president of the Cotton Manufacturers Association of Georgia at the closing session of the 53d annual convention. Mr. Jewell is the third member of this textile family to head the Georgia association. He is the son of the late D. A. Jewell Sr., who served as president in 1919-1920 and brother of D. A. Jewell Jr., who was president of the association in 1930-1931. He takes over from J. M. Cheatham Jr., Dundee Mills Inc., Griffin, Ga., who has directed the association through a year in which much progress was made.

R. H. Jewell

J. M. Cheatham Jr.

In the activities of the Cotton Manufacturers Association of Gorgia, Mr. Jewell has been an active and tireless worker and leader. Besides holding numerous committee assignments, he served as director of the C.M.A.G. for three years, 1948 through 1950, as treasurer in 1951-52, and as vice-president for the fiscal year just ended, 1952-53. His election to the presidency at the final business session of the association's 53rd annual meeting, at Boca Raton, makes him the 42nd Georgia textile mill executive to be accorded that high honor.

Born in Jewell, Ga., on June 25, 1897, Mr. Jewell received the early part of his general education in the public schools of his native community, and later attended the Chattanooga (Tenn.) High School. After graduation there, he matriculated at the Georgia School of Technology before his education was interrupted to serve in the United States Coast Artillery during World War I.

After completing his education at the New Bedford (Mass.) Textile School, following the war, he became associated with Crystal Springs Bleachery, Chickamauga, and rose rapidly in responsibilities to his present position of vice-president. His family has been prominently identified with textiles for many years, and his grandfather was the founder of the second textile mill in Georgia.

George E. Glenn Jr., president, Exposition Cotton Mills, Atlanta, was elected vice-president to succeed Mr. Jewell. Morris Bryan Jr., president of Jefferson Mils, Jefferson, was elected treasurer, succeeding Mr. Glenn.

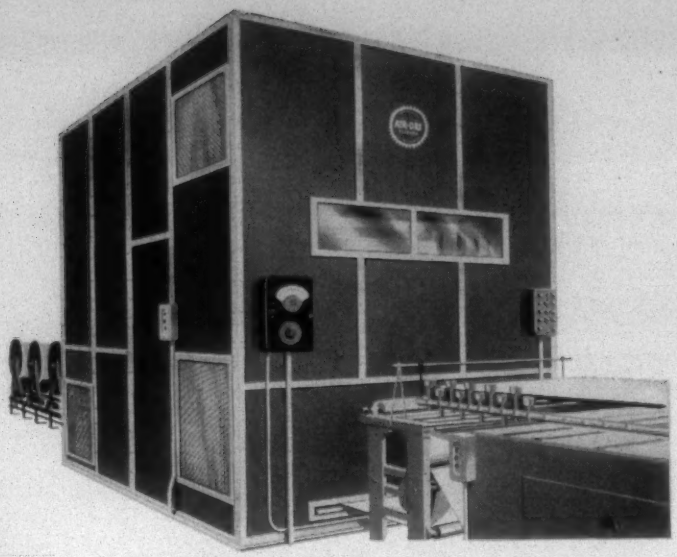
Five new directors were elected as follows: Lewis Price, Callaway Mills Co., LaGrange; P. D. Ostrander, Goodyear-Clearwater Mills, Cedartown; John T. Baum, J. P. Stevens & Co., Milledgeville; Jack Smith, Pepperell Mfg. Co., Lindale, and Emerson Bullard, Coats & Clark Inc., Atlanta.

T. M. Forbes

Frank Carter

T. M. Forbes was re-elected executive vice-president for his 26th consecutive year and Frank Carter was re-elected secretary. R. L. Murphy again was selected as traffic manager, a post he has filled a number of years.

Henry W. Swift, vice-president of Swift Spinning Mills, Columbus, a past president of the association, was chairman of the nominating committee.



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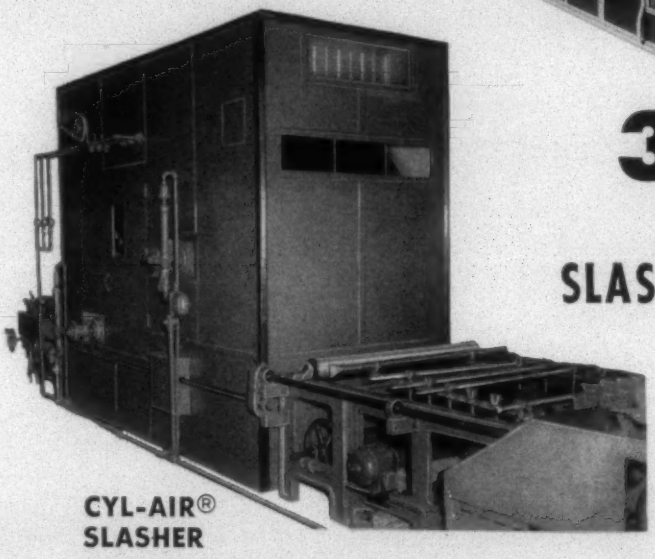

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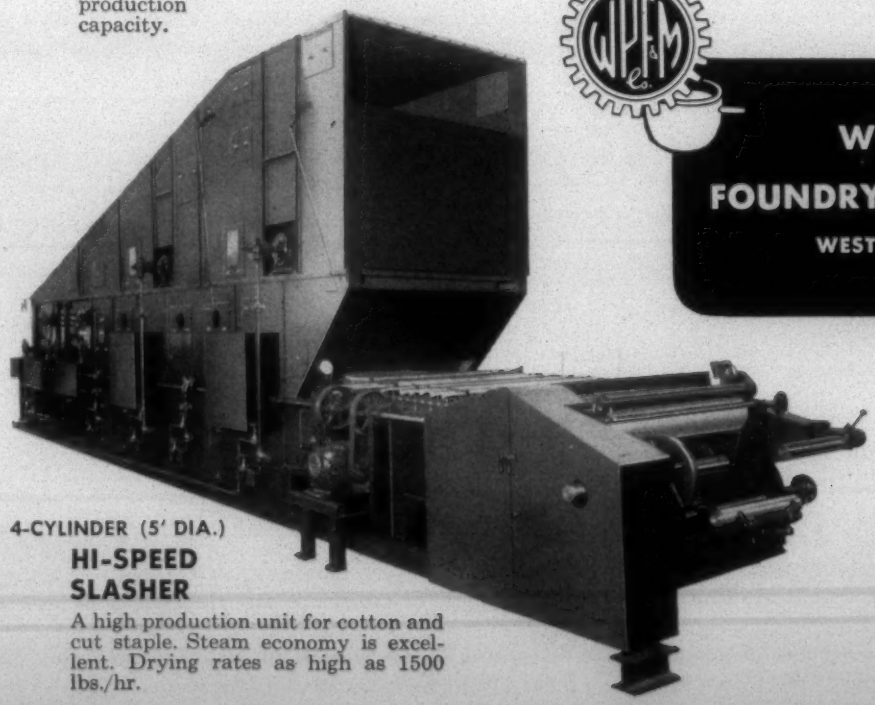

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too, could make a worthy contribution—by recognizing that depreciation allowance on productive equipment now prescribed by the Treasury Department are making it impossible for the nation to achieve maximum economic stability."

"Flexible depreciation allowances for tax purposes would provide incentive for continued expansion of American business, particularly in the heavy goods industries. One of the best ways to make sure there will not be a depression will be to keep American machine and machine-tool industries operating on a full basis. The best way to accomplish this would be to facilitate modernization of manufacturing plants by the purchase of new productive equipment."

Mr. Jackson asserted that such allowances would "insure that the versatility of our productive capacity would enable the United States to continue to be the effective arsenal of democracy. They would further technological development and improvement of the country's tools of production; they would sustain increases in productivity and improve living standards for workers."

He said it was only through rapid replacement of productive equipment that it is possible for industry to take earliest advantage of scientifice and technological progress that is bringing forth revolutionary machinery and processing developments. "But present depreciation schedules that prolong recovery of original investment over periods averaging—in textiles—about 25 years," he continued, "are hardly conducive to rapid replacement."

The A.C.M.I. executive said that business managments also could contribute to a better business, jobs and communities "by developing in the period ahead intensified sales promotion programs, and better employee-relations and community-relations programs." He added: "Here the government can help again—by reducing tax loads as soon as possible; by permitting the unsound, unworkable and administratively expensive excess profits tax to expire as soon as feasible; by the construction of productive public works such as highways, where and when they could take up the slack occasioned by the falling off of government expenditures because of lessening of defense urgencies."

He said these were some of the things that could be done "in the national dedication to the big task ahead—a task which can only be accomplished if full expression is given to all the forces of a free business enterprise system and there is full acceptance of moral and social responsibility. If this is done, we will have no reason to fear the future, and America will continue to move ahead on the principles of peace and freedom on which it was founded."

Life Among English Textile Workers

By WILLIAM HAYS SIMPSON – Part Four

Education

THE vast majority of cotton mill workers in England have had little formal education. The age limit for compulsory school attendance during this century has been low as compared with American standards, for it was not until 1947 that a law was enacted which raised the school leaving age to 15. It is hardly surprising, therefore, that of the 499 operators interviewed only 28 attended school after they were 14 and of this number only seven remained in school after they were 15 years of age.

A number of these young people beginning work in certain textile mills enrolled in continuation schools which they attended two half-days a week. The boys are taught arithmetic, English, woodwork; the girls, English, arithmetic, cooking and sewing. Instruction in spinning and weaving is given in many mills.

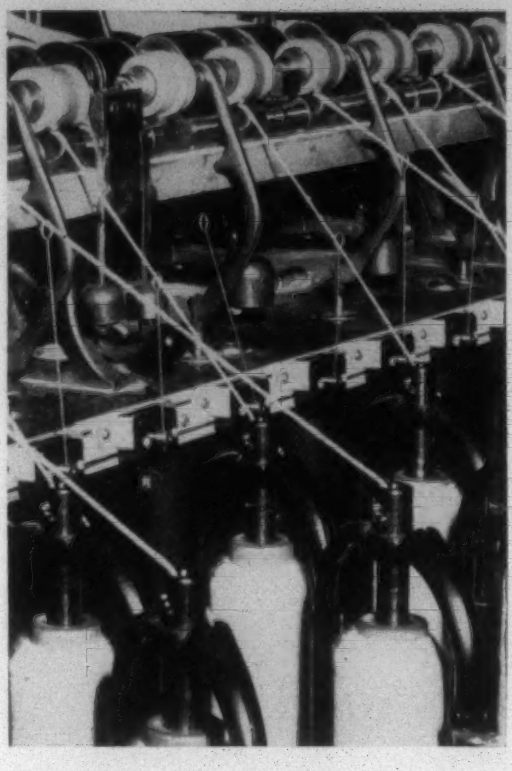
Over 40 of the employees interviewed had taken courses in 15 different technical schools in Lancashire. These schools are supported by the local government and by student fees. The policy of the management in assisting employees in paying these fees varies throughout the industry.

In the larger technical schools the textile department is one of several departments including among others, building, commerce engineering and science. Typical of this type of schools is the Municipal Technical College and School of Art at Blackburn. The equipment of the textile department of this school includes: (1) a complete plant suitable for the spinning of cotton and spun rayon; (2) a weaving shed containing approximately 50 looms of types similar to those in the local industry; (3) a well-equipped textile testing laboratory in which facilities are available for the training of students and for the testing of textile materials for industry; (4) a textile chemistry laboratory and dyehouse; and (5) a textile mechanics laboratory. Full and part-time day courses as well as evening courses are given on textile subjects. This school also gives evening classes during the Summer. All of the operatives interviewed who had taken vocational education courses took either the part-time day or evening courses in textiles.

Instruction in a high scientific level is given in the textile departments of the University of Leeds and the College of Technology, Manchester University. Entrance requirements into these institutions is higher in the fields of mathematics and science than in most American universities. Students admitted to degree courses have some knowledge of calculus and have spent two or three years in the study of elementary physics or chemistry, or both.

While none of the textile workers interviewed had taken correspondence courses, such courses of study have been promoted by the Workers' Educational Trade Union Committee in conjunction with Ruskin College, Oxford. In this program of work the college endeavors to meet the needs of persons unable to attend a course of lectures and the work offered is closely related to the needs of the workers and the organizations in which they are interested. The offerings include courses in economics, government, psychology, English, and philosophy any of which subjects may be taken by workers who are able to meet certain educational requirements. A few textile employees have enrolled for this study.

The Shirley Institute, located on a 21-acre plot in Didsbury near Manchester, is primarily a research organization. Here in its modern laboratory buildings, textile processing rooms and engineering shops research is carried on in cotton from raw material to the finished product. Practically all



The Most Effective Cure for Defective Roving

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A Valued Endorsement

A well known manufacturer of rayon acetate yarn, in their instruction booklet on processing procedures, includes the following statement about our Roving Stop Motion:

"As good spinning is dependent on good roving, every precaution should be taken to produce a uniform package on the fly frame. ..... If one side is producing soft bobbins and the other side produces hard bobbins, the two densities will not produce the same yarn quality. A medium hard uniform package is desirable, but if it is too hard, the roving is stretched and non-uniform yarn results.

"There is a new stop motion on the market which is showing up in a very favorable light. This type stop motion will immediately stop the frame in case of a choke, low tension, or weak roving. The quality is improved, because when one end breaks down, it cannot whip around and make a doubling or break other ends down. This stop motion allows more spindles per operator with less work on his part. Spinning is improved also, because the roving contains fewer piecings which results in better winding and higher grade yarn."

WITH THE ADAMS ROVING STOP MOTION YOU'LL REALIZE THESE SAVINGS

Less Waste • Less operator time • Less ends down • Full frame production • Improved yarn quality • Low price—only $5.00 per spindle or $450.00 minimum per frame • Small service charge on first installation and installation is so simple your own electrician and mechanic can equip remaining frames • Practically no maintenance cost • Substantial savings on mangrels, aprons, etc. • 12-volt operation • No extra floor space required.

THE ADAMS ROVING STOP MOTION HAS BEEN OPERATING IN ONE LARGE SOUTHERN MILL FOR FOUR YEARS AND IN FOUR OTHER WELL KNOWN MILLS FOR OVER SIX MONTHS WITH PERFECT SATISFACTION

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the cotton mills in the United Kingdom are supporting members of the institute and, therefore, are informed of the results of research through confidential bulletins, lectures, or by correspondence. The results of much of the fundamental scientific work is published in scientific journals and is thus available to the interested public.

The library of Shirley Institute has a very good collection of printed material on textiles which is available to interested persons. The institute's young laboratory assistants who do not have the skill to carry on the high type of work required at Shirley are given training in accurate experimentation and the theoretical background of the various operations. All laboratory assistants may work for a university degree and the facilities offered include time off for attendance at local technical colleges during the day (the students then being expected to attend also on some evenings each week) and payment of fees on satisfactory completion of the course.[1]

The institute also assists university students by accepting a limited number for vacation work during the Summer months and it also awards a number of fellowships to deserving graduates to continue research work.

The Shirley trainee as described by Dr. D. W. Hill has three variations. The first, staff, usually juniors, from member mills who desire training in some specialized technique are admitted to the institute for periods of a week or a month or more for special study. Under the second plan staff from member mills are enrolled for a short period of training, usually about six weeks, which takes them through each of the main departments. The third plan permits trainees to take a course at the institute designed to inform them of the various ways in which modern science seeks to aid the many branches of the textile industry. Each trainee must be nominated by the British Industry Research Association and the course lasts from nine to 12 months. As trainees admitted to this group are expected to have already received training in conventional methods, emphasis is placed on the methods of research, and an effort is made to give a view of the inter-relation of the technical processes of the industry. This trainee plan has served as a refresher course for returned service men who plan to occupy managerial or other similar positions.

Members of the staff at Shirley Institute also give series of lectures on selected technical subjects during the Winter months to staffs of member firms in the textile districts. These lectures have been well attended and are published in a series of pamphlets.

SLATER'S DREAM—The story of how 21-year-old Samuel Slater overcame odds to create America's first high-speed cotton mill in 1790 was dramatized on the Du Pont "Cavalcade of America" N.B.C. telecast May 13 as a highlight of National Cotton Week. In this scene from the TV film, Slater takes time out for a spot of tea with his future bride. In the background is a working model of the spinning frame he built by memorizing details of the secret Arkwright frame and escaping from England despite laws against the emigration of textile artisans. The 25-minute film, "Slater's Dream" shows how the brash apprentice, who is known today as the "father of the American cotton industry," overcame setbacks to complete his mill at Pawtucket, R. I., and won the love of Hannah Wilkinson, blacksmith's daughter.

Credit Facilities

Unlike Americans, the English textile workers abhor the borrowing of money; for only two of the 499 operatives interviewed had ever borrowed money from finance companies or banks for any purpose other than to buy homes. The general idea expressed were "borrowing leads to sorrowing" and "why should I borrow anyhow, I would just have to pay it back." And so they lived without incurring such financial obligations.

However, 150 of the 499 operatives had at some time during their lives engaged in installment buying or hire purchase as it is known in England. This type of purchase is not promoted nearly as much by English as by American merchants but most articles are available for purchase on an "easy pay plan" with approximately a ten per cent carrying charge. Included among those articles bought under installment plans by textile workers were radios, bedroom and living room furniture, stoves, vacuum cleaners, carpets, washing machines and bicycles.

A large percentage of the cotton mill workers save their money for larger purchases. Of the 499 operatives interviewed 238 had at one time or another savings accounts in banks while 171 used postoffices for a similar purpose. A portion of the above-mentioned operatives had used both the banks and postoffices as depositories for savings accounts.

Some of the cotton mills have voluntary savings clubs. Where such are established employees may usually join either at the beginning or at the middle of the year and may deposit any amount of money they desire on each payday. The funds are kept by the management and three per cent interest is paid on deposits removed at the end of the six or 12-month periods. Interest is not paid on amounts withdrawn at other times. While comprehensive figures are not available on savings of this type it might be noted that the management in one of the cotton mills paid out a total of £12,482 to 671 employees in 1950.

Use is made of co-operative societies or stores by

[1]See Hill, D. W., Technical Training and the Shirley Institute, *Education and Training for the Cotton and Rayon Industry*, pp. 151-154.

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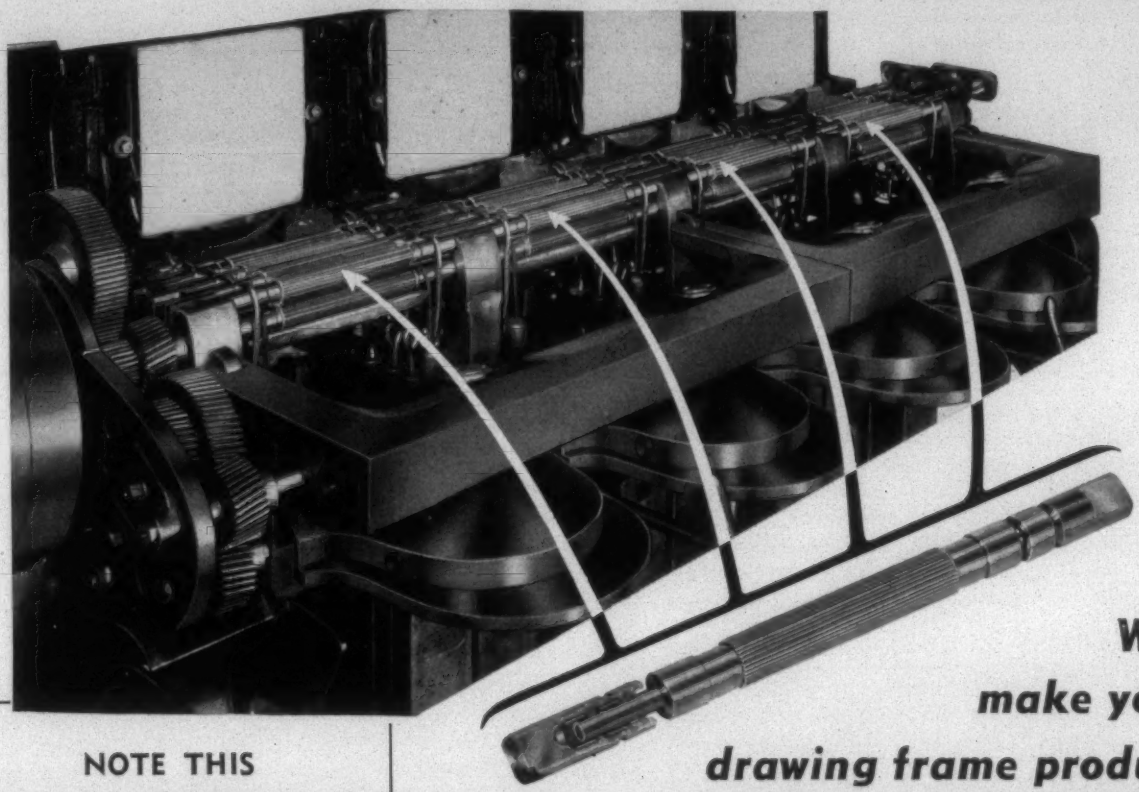

Will make your drawing frame produce a far better grade of sliver

NOTE THIS

The collars and necks on the new GOSSETT metallic roll are thoroughly hardened and then scientifically tested. The tolerance on the flutes, collars, and neck is plus or minus one-half of one thousandth of an inch. The run-out of straightness will not exceed plus or minus one thousandth of an inch. GOSSETT also manufactures common or cushion type drawing rolls with the same tolerance as mentioned above.

Here's what you get when Gossett re-builds your drawing frame!

In addition to installing the new GOSSETT metallic roll, the top rolls are equipped with GOSSETT roller bearing shells (there are none better); new stands, new calender rolls, new tension train of spiral gears and studs, new drafting gears and studs, and new trumpets are installed; and the coilers and can tables are re-built. You get back an old drawing frame better than when new.

GOSSETT will also re-build drawing frames with the 5-roll system in the same manner.

In the mills now using their old drawing frames that were recently re-built by GOSSETT technicians who installed the new GOSSETT metallic drawing roll, the results have been amazing!

It required months and months of research and designing to develop the new GOSSETT metallic drawing roll. The flutes on this new roll are so designed that it is now possible to produce cotton or synthetic drawing sliver that is far superior in quality to anything known in the past. And, as most everybody knows, quality counts more today than ever.

Find out for yourself what a difference quality makes. Let GOSSETT re-build your drawing frames and you, too, will get better quality sliver than ever before.

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numerous cotton mill workers for savings and purchases. The Co-operative Wholesale Society by 1950 had more than eight million shareholding members with a share capital of over £20,000,000. This co-operation included 798 retail co-operative societies in England and Wales. The economic advantages of this organization are enjoyed by textile workers as well as others.[2]

National Health Plan

National health insurance in Great Britain was provided for in the National Insurance Act of 1911 and became operative on July 15, 1912. In 1938 all workers under 16 years of age were included thus affording coverage to practically all wage earners with the exception of non-manual workers with an annual income of more than £250. There were a few exceptions and others could claim exemptions if they could prove that they had a pension or unearned annual income of at least £26 or if they were mainly dependant on someone else or a non-insurable occupation.

The contribution under this insurance plan was nine pense for men and 8½ pense for women of which 4½ pense was payable by the employer, the rest by the employee. The rate was the same irrespective of age of the insured. The state aided in defraying to the cost of all benefits and the costs of administration.

Briefly stated, the benefits to insured persons included (1) medical benefits, free medical attention by general practitioners and necessary medicines. (2) Sickness benefits of weekly payments of 15 and 12 shillings a week for men and women, respectively. Sickness benefits were payable from the fourth day of incapacity and could continue for a maximum period of 26 weeks. This rate was payable only to workers who had been insured for a minimum of 104 weeks and had made 104 contributions to the plan. Persons first became eligible for sickness benefits when they had been insured for 26 weeks and had made 26 weekly contributions. The rate payable then was nine and seven shillings six pense to men and women, respectively. (3) Disability benefits began after sickness benefits expired but at a reduced rate. The weekly benefits were seven shillings, six pense for men, six shillings for unmarried women. To qualify for these benefits claimants must have made 104 weekly payments to the plan. (4) Maternity benefits, £2 payments for confinement of an insured woman or wife of an insured man provided the insurance had been effective for 42 weeks. (5) Additional benefits were in the form of an increase in standard rates of cash benefits or payment toward the cost of various forms of treatment required by insured persons such as convalescent home treatment. These benefits differed from the ordinary benefits in that they were only payable by approved societies which had a surplus available for the purpose.

It may be noted that under this plan that while insured workers could get medical treatment free their wives and children could not, thus well over 50 per cent of the population had to make private arrangements for medical care. To meet the needs of these persons the National Health Service Act was passed in 1946 and became effective on July 5, 1948.

The objectives of this act are to promote and establish a comprehensive health service for the improvement of the physical and mental health of the people, to prevent, diagnose and prescribe the nature of the treatment of illness and to bring physical and mental health services together as a single service.

The cotton mill workers, like their fellow countrymen, may select their own family doctors provided the doctor consents and that the doctor's "list" is not already full having regard to numerical limitations. Persons who fail to choose, or who are refused by a medical practitioner, are allocated to doctors in their area.

But this plan of selection of doctors has not met with unanimous approval and various textile workers said that they asked for medical services only when in serious need of care. Others said that they "hated to wait so long for their turn to see the doctor" still others when given the choice of recovering by a visit to the pub or the doctor's office, selected the pub.

However hard it may have been to see the doctor only two of the 499 operatives interviewed said they could not obtain medical care when it was desired. But of this number 194 reported that they had not seen a doctor during the past year while 141 had consulted a doctor only once. Thus over 50 per cent of the textile workers interviewed saw the doctor not more than once during the year. There were some constant visitors, however, one operative received treatment once a week and another one twice a week throughout the year. Approximately nine operatives had consultations at the doctor's offices to one, who required a home visit.

Four of the textile workers said that the medical treatment was not satisfactory one of whom said that it was doubtless his nerves and that he had no faith in doctors. The others said that they "simply didn't get better after taking the medicine."

Only ten of the operatives interviewed had been patients at a hospital during the year, one of whom stayed only for a short time for treatments. The others stayed for periods ranging from one week to five months. All reported that the treatment was successful but one said that the care was not good.

While possibly the independence of the cotton mill workers has in general caused them not to more often avail themselves of medical services, no explanation has been given for their general disregard of dental care. The common feeling of the textile operatives, even the young ones, is that a filled tooth would give a person trouble at some future time and that the best thing to do is to pull it and thus be free from trouble at once, and for all time.

Doubtless because a large number of those interviewed had already acquired false teeth some 299 of the 499 operatives had not seen a dentist during the past 12 months. Seventy-five operatives had made only one visit to the dentist during the year. There were many complaints about having to wait too long for appointments but only one operative reported that he could not obtain dental care.

Of the operatives receiving dental care during the year, almost twice as many had teeth pulled as had them filled. Only four operatives reported that the work was unsatisfactory but many objected to the long waiting periods for service. This was especially true of those who had all their teeth pulled in preparation for false teeth. One operative said, "The dentist pulled all my teeth and I had to wait a year for my new ones and then they didn't fit. I can't use

[2]See *The Peoples Year Book* (1950) prepared by Publications Department Co-operative Wholesale Society, pp. 7-36.

the bottom ones." This was doubtless an extreme case but few operatives obtained their dentures in less than three months. One worker reported that he had to wait for 18 months. It may be added, that a casual observer would note that the general appearance of the dentures, so prominently displayed by smiling workers, lacked much to be desired.

National Insurance

Mention has already been made of the National Health Plan as it existed prior to 1948 but Britain had also some years ago enacted unemployment insurance and workmen's compensation laws. But since World War II Britain has adopted public programs which include practically all of the people and provide benefits to children, the aged, the sick, the widows, the pregnant and the retired. Practically all the ills which await persons are covered to some extent by a system of national insurance.

The National Insurance Plan is financed by contributions from employers, employees, self-employed, non-employed and the government. Some idea of the amounts contributed may be noted in the following table.

SCALE OF SOME WEEKLY CONTRIBURIONS, 1952

	Individual	*Employer*	*State*
	S. d.	S. d.	S. d.
Men, 18 and over			
Employed	5 9	5 0	1 6
Self-employed	7 5	....	9½
Non-employed	5 7	....	9

The scale of contribution for women is about four-fifths that of men and is lower for all persons under 18 years of age. It may be noted that the self-employed and the non-employed pay more than the employed and in cases of the employed where the employer also contributes he pays less than the employee and the government pays less than the employer. This balance of burden, with greater cost to the individual, is a notable contrast to the social security plan in the United States.

Industrial Injuries—The plan covers all employed persons including non-manual workers without qualifying periods of either employment or contributions. The benefits vary with the degree of injury. There is provision for an unemployability supplement and a hardship allowance which may be paid as long as the total pension does not exceed a designated amount. Allowances are paid for dependents as long as the injured person is unable to work. Death benefits are in the form of pensions to the wife and in certain instances death allowances are paid parents or other relatives. Lump sum amounts are paid to help with funeral expenses on the death of the insured on one of his dependents.

Retirement Pensions—Men at the age of 65 and women at 60 may retire from regular work and receive a weekly pension of 32 S. 6d. (about $4.55). A married woman who is not insured in her own right can qualify for a pension of 21S. 6d. (about $3.01). Larger pensions may be earned by remaining at work beyond the minimum pension age. Widows draw the full rate, and the first child, under school age or up to and including July 31, following the 16th birthday if still at school or doing apprentice work, adds 10 S. 6d. a week (about $1.47) and an extra 2S. 6d. (35 cents) a week for each additional child.

Unemployment Benefits—Unemployed men, single women, and widows, 18 years old or over, are entitled to weekly payments of 32S. 6d. (about $4.55). Married women, for example, if living apart from husbands and cannot get financial assistance from them, are entitled to the larger weekly benefit of 32.6d. The standard periods of benefits is limited to 180 days of unemployment. Up to July, 1953, persons who have been insured against unemployment during the last five years or more are entitled to additional days of standard benefit. The maximum number of additional days which may be paid in one period of unemployment is 130, giving a total of 310 days of standard benefit. Claimants who exhaust their right to standard benefit, but continue to satisfy all the other benefit conditions, may apply to local tribunals which may recommend extended benefits if local industrial conditions warrant such action.

Sickness Benefits—Sick men, single women and widows over 18 years of age are entitled to draw a weekly pension of 32S. 6d. ($4.55) while married women are allowed 22S. ($3.08) but if they live apart from their husbands the pension is 32S. 6d. An additional 21S. 6d. ($3.01) is given for an adult dependent and 10S. 6d. ($1.47) for the first or only dependent child. For each dependent child after the first 2S. 6d. (35 cents) is allowed. Every claimant who satisfies the conditions and has not been disqualified can receive up to 52 weeks of benefit in any one period of interruption of employment. However, after 13 weeks of employment additional time accrues. Those persons who have made insurance contributions for three years or more are entitled to sickness benefits until they reach an age where old age pensions are paid.

Maternity Benefits—Maternity benefits comprise (1) A maternity grant of £4 ($11.20) for each child born. This is expected to help defray the general expenses of confinement, clothes for the baby, etc. (2) Attendance allowance of 20S. ($2.80) for four weeks immediately following the birth of the baby to help defray the cost of domestic assistance. (3) Maternity allowance of 36S. ($5.04) a week paid normally for 13 weeks beginning six weeks before the expected week of confinement. This allowance makes it easier for employed women to give up their work in good time before the birth of the child and not to return to work too soon afterwards.

National Assistance—Any person 16 years of age or over who is not in full-time work may apply for assistance to the National Assistance Board. Persons involved in trade disputes, however, are disqualified from receiving assistance except, if needed, for their dependents. The benefits allowed will vary in accordance with needs. For example, a married couple on part-time work would be assured under this plan of a weekly income of 40S. ($5.50) to meet their needs other than rent.

Family Allowances—Allowances of 8S. ($1.12) a week for every child after the first are payable to all families with children of qualifying age, regardless of need. These benefits are financed from general taxation and are subject to the income tax.

Other Social Benefits—The widows and orphans are covered

COTTON WEEK IN THE BIG CITY—Mayor Vincent R. Impellitteri proclaimed the week of May 11 to May 16 as Cotton Week in New York City, noting that the city is the "world's foremost cotton textile market," where nine billion yards of cotton goods change hands annually. National Cotton Week, celebrated as "Cotton Time," is observed each Spring in salute to King Cotton and the 12 million Americans who grow, process and distribute cotton and cottonseed products. Mayor Impellitteri presented his official proclamation at City Hall to a delegation of industry leaders headed by John M. Reeves *(right)*, president of Reeves Brothers Inc., as representative of the National Cotton Council of America, and W. Ray Bell *(left)*, president of the Association of Cotton Textile Merchants of New York. Mr. Reeves is a member of the advisory committee to the council, which sponsors Cotton Week.

under the scheme and grants are paid on the cost of funerals. Other social services include free milk at schools, child guidance, low-priced school meals, free legal aid and rehabilitation and special employment for the disabled.

Nationalization

It is not within the realm of this study to discuss the various events leading up to or the problems relating to the nationalization of industry in the United Kingdom. The nationalization of the Bank of England, March 1946, civil aviation, August 1946, telecommunications, January 1947, and iron and steel, February 1951, interested the textile workers little if any. Nor did any of them express much interest in the action of the government in nationalizing the industries more closely associated with their daily life, coal, inland transport, electricity and gas. They did, however, express considerable interest in what happened after the government began operating these industries. Many with regret and often with bitterness, said "as soon as the government took over our costs went up."

Each of the 499 cotton mill workers interviewed were asked questions concerning the effect of the nationalization of electricity and coal on their lives. There were only a few criticisms of the electric service; that there was not enough current and that it was off sometimes. Practically all of them complained, however, about the increase in the cost of electricity. They were joined in this complaint by the cotton mill owners who expressed special concern about the increase in rates which became effective in 1952.

To the question, "Is coal better now than before nationalization?" 279 operatives replied, "No, it's worse"—a number of them with considerable emphasis. Forty-two thought it was better, the remainder said it was about the same as before nationalization. Some textile workers said that before nationalization the coal was cleaned but that now it was often filled with dirt, slate and stone. They complained about the increase in the price of coal since nationalization and pointed out that since the coal now included non-inflammable material the price increase was greater than the quotations showed. Since coal is rationed with 2.8 (short) tons a year per consumer in the northern zone, and 1.9 tons in the southern zone, the cotton mill workers felt that the coal they were allowed to buy should be of a good quality.

A number of employers agreed with the operatives in their objections and added that they had been sold very inferior coal at times to run their mills. They reported that under such circumstances it was difficult to operate their plants and that corrections, if or when made, were wrapped up in a lot of bureaucratic red tape.

It may be observed that while the textile workers in England enjoy many benefits unknown to laborers of two decades ago, there are still, in 1953, certain food items rationed to all persons. The amounts allowed are changed from time to time but in 1952 each person was restricted to five ounces of bacon, one ounce of cheese, two ounces of butter, five ounces of oleomargarine, two ounces of cooking fat, two shillings (28 cents) worth of meat, ten ounces of sugar and an average of two or three eggs a week. Each person was limited to 24 ounces of candy per four-week period. To various workers these restrictions seemed unreasonable but many quickly pointed out that rationing is not as severe as it was. Such is doubtlessly true, for rationing of bread ended in July 1948, jam in December 1948, gasoline in May 1950, soap in September 1950, and tea in October 1952.

Finally the 499 cotton mill workers interviewed were asked that after considering all the changes which had taken place during the past several years did they feel that their economic condition had improved between 1945 and 1950. Of the 348 who replied to this question 167 said "yes," 171 "no." Those not answering the question were either in the service or too young to work in 1945 or had no opinion on the matter. When asked if their economic condition had improved since 1939, the vote was in the affirmative 192-109 with the others abstaining for the same reasons as mentioned above.

The Why And What Of Textile Research

By DR. L. H. HANCE, Executive Vice-President and President-elect

The Institute of Textile Technology, Charlottesville, Virginia

WHY are we doing research? At no other time have we have been faced with the need to do research as we have in the last few years. We look around us and see the tremendous advances made in the automobile business, from the T-model Ford to the cars of the present time. Look at the advances in radio and in the airplane and electrical and chemical industries. One of the reasons why textile people are doing research is that the strides in the other industries have inspired us to keep pace, to be progressive Americans. Another reason, I think, is that the accomplishments of the chemical people in developing the various synthetic fibers have left us slightly bewildered. Today the consumer asks: "What shall I buy?" I think the fact that textile people with no previous knowledge had to process these fibers led to the idea of doing research.

What are research people? They are just like everybody else except that possibly they are just a little bit queer in the way they think. They have been trained to be very observant; they have been trained to gather facts. They are trained as doctors are trained to diagnose cases. We have been forced to do research to learn more about the new fibers and how to process them. At the same time we have been forced to do research on the well-known fibers with which we have been familiar all our lives and which we have worn all our lives, in order to keep up.

I should like to take a few minutes of your time to ask how we have met the challenges that have been raised. This has been an area which has taken a number of the new fibers and proved that you can run these new fibers in your mills and make money out of them. That is something to which I think you can point with pride. At the same time other mills have recognized the challenge and have met it

by establishing laboratories and setting aside funds for research. An interesting parallel to me has been that this research has to come from the laboratory. A number of people thought it should come from a laboratory located in Timbuctoo. But that does not work out. We found it had to come from a laboratory located right alongside of the mill.

The next method by which I think the textile people have met this challenge has been through co-operation. There seems to be, as far as we can see in our position here, a new spirit among textile people. When I was growing up in textiles I was very much impressed by the fact that the number of cotton mills run was 1,050 units, let's say. They were a loosely knit group; they were very individualistic. Yet in the last ten years we have seen co-operative thinking developing. This co-operative thinking has grown into a number of research projects, and particularly we are proud of the co-operative spirit that has developed into the Textile Research Laboratory.

We like to point to a number of ways in which research can be profitable. But our group is a research group, and we know that research is hazardous. Many times we get nothing out of it; then at other times it pans out very nicely.

In the institute we are working on several types of research. In the first place there are what we might call long-range projects, which are owned by our members. They are owned by all the members together, and each one shares in the results obtained. Then we do a lot of work on what we call short-term research for individual mills, and the mills are allotted so much money from their annual dues to pay for this type of research. The third type is sponsored work within our membership.

We have at Charlottesville a very nice laboratory, divided into the fields of physics, chemistry, engineering and textile processing. In the field of physics much work was done on uniformity measurements. Through this group of workers instruments were provided for measuring weight-per-unit-length to determine the uniformity of yarn, roving and sliver. Another product is an instrument for the instantaneous measurement of the inch-by-inch variations in picker laps. You might call them imperfection counters which eliminate from this yarn the human judgment or human error, by putting the measurements on a constant machine basis. This group had one goal, and that was to develop methods for measuring things that had never been measured before. You are familiar with the idea of selling yarn that breaks at so much or that has a constant count. There was a period when we looked at a great many things, and one of the first observations we made was that many things exist in processing and in producing finished products that have never been measured.

The chemical group had two primary goals, specifically, with regard to cotton. The first was to develop a chemical modification of cotton that would make it more susceptible to processing as an end-product. You look at cotton today and know it is susceptible to mildew. It is very susceptible to stretch. We know it is susceptible to heat. You know that if you put heat and water on a cotton fabric soon there will be a hole in the fabric. So this group has been working in this area, and I feel from the work we have finished in the last three months we are on the road to a modified cotton which possesses all of the original properties of cotton and yet has also most of the ones that any of the new synthetics has. Of this we are very proud.

The second great goal in that group over a period of years has been to develop chemical aids to cotton processing. Many of you have heard of the studies on the use of colloidal silica and conditioning oils and their effects on the processability and properties of the resulting fibers, yarns and fabrics. I can say that that work is really beginning to pay off, though so far we have just scratched the surface.

The institute has developed a product for treating cotton fabrics to make them more resistant to soiling and easier to wash clean after soiling, and a number of the commercial laundries in Charlottesville are using it.

Coming down to engineering, our efforts are to develop a better grade of yarn, more uniform yarns, cotton fabrics more resistant to wear and water, to develop and improve testing equipment, and to develop more efficient opening and cleaning equipment for cotton.

I think one of the biggest stimuli to this thing has been the 17-mill ginning and spinning test. That was a co-operative experiment sponsored by the National Cotton Council and the American Cotton Manufacturers Institute in which 17 mills presented their methods of making 30s and 40s yarn. The challenging thing about it, to me, was that no one mill in that group made its yarn in the same way as any other mill. They did not have the same distribution of draft and did not have the same cleaning operations, and they differed in other ways. So here were 17 very successful cotton mills doing the same thing by different methods. What did that mean to us? It meant that somewhere along the way there must be an optimum. So we concentrated on determining if there is an optimum draft distribution, if there are optimum roving sizes for different yarn sizes, and so forth.

I should like to close by giving you a description of the type of project we are now undertaking in 20 mills in our membership. In the last few years we have heard much about the picking of cotton. We know that we have

FOUR REPRESENTATIVES OF THE TEXTILE INDUSTRY who serve as collaborators of the Southern Regional Research Laboratory of the U.S.D.A. Bureau of Agricultural and Industrial Chemistry met recently in New Orleans to review with staff members the laboratory research program on cotton mechanical processing. Shown with R. J. Cheatham *(center)*, head of the laboratory cotton mechanical processing division, are *(left to right)*: Charlton H. Williams, president, Swift Mfg. Co., Columbus, Ga.; William A. Turner, vice-president, Avondale Mills, Sylacauga, Ala.; Mr. Cheatham; Walter G. Regnery, president, Joanna (S. C.) Cotton Mills Co.; and Norman E. Elsas, chairman of the board, Fulton Bag and Cotton Mills, Atlanta, Ga. Mr. Williams replaced Earl M. Heard, vice-president and director of research, West Point (Ga.) Mfg Co., who served as a collaborator from 1949 through 1952. The collaborators serve the laboratory on a rotation plan under which leaders in the textile industry contribute suggestions and ideas to help the laboratory maintain a practical program of investigations leading to the greatest possible benefits to both farmers and industry.

machine-picked cotton coming out of the West. We know that the trend is in the direction of machine-picking, and we know that cotton picked by machine is very dirty and that when it reaches the mill we have to do a lot of cleaning. Now, what is the best machine on the market to do that cleaning? I think if we asked you that question we would get many different answers. The companies that manufacture machines have been working like mad to produce a new cleaner. We have heard of the new Shirley, from England, and what it can do for us. Whitin and Saco-Lowell both claim they are coming out with new cleaning lines in the next year or so. But nobody has given us figures. So we decided in our group that somebody has to make a study on what the relative cleaning efficiency of every machine on the market would be. To do that we have bought a large amount of cotton, and with our members and with 20 mills producing every type of product on the market we are processing that cotton. We are checking settings, speeds, the influence of neps on count, the variation of sliver, picker laps produced, etc., etc., on the type of yarn produced. We feel that the outgrowth of this will put us in a position in which we have never been before. We shall be through with that in the Fall and present it to our membership.

I should like to say that all of these results have been made possible by the fact that people have walked together. When we started into this observation period, or period of research, there was great hesitation on the part of people who had long been in the industry. The thing that has come out of this is that both elements can sit in the front seat of the car and know where they are going. One can sit in the driver's seat and do the driving, and the other can sit on the other side and read the road map and be the navigator. Both can participate, and I think you will agree with me that the development of this spirit has enriched the textile industry.

Dr. Hance's remarks were presented April 25 at Fieldale, Va., before the meeting of the Northern North Carolina-Virginia Division of the Southern Textile Association.

Cone Mills' Eye-Testing Program Pays Off

THE employee eye-testing program which Cone Mills began two years ago is today paying dividends way out of proportion to the investment required to inaugurate and maintain the program. Not only has worker efficiency been improved and accident hazards reduced, but employee morale, of which the first two mentioned benefits are always by-products, has enjoyed a considerable improvement. Because of the program, innumerable workers now enjoy greater confidence in their work, as well as more enjoyable leisure time during their off-hours.

Miss Phoebe Richards of the Cone Mills personnel department administers the visual test which some 8,000 Cone employees have taken to date. The test is used to determine whether Cone workers need eye correction or not. If their eyes are defective, new applicants for jobs are required to have them corrected before they are employed. Incumbent employees are not required to have glasses fitted for them, but so far about 70 per cent have co-operated with the project. The machine being used above is the Keystone Tele-Binocular eye testing device.

The testing is actually divided into two phases, according to Miss Phoebe Richards of the personnel department, under whose direction about 8,000 Cone employees have had their eyes examined. The first phase is the testing of the eyes of all persons who apply for jobs at Cone Mills for the first time. If the applicant's eyes don't measure up, he is given five weeks in which to make the correction before losing his chance to get the work. This phase of the program has had the effect of causing job seekers to have their eyes corrected before ever placing their applications. When the program was first inaugurated, about 22 per cent of all those applying for jobs needed eye care. Now only about ten per cent need it.

The other phase of Cone's program is the visual testing of old employees. All of them are required to take the test, but they are not required to have the correction made, unless they present a very definite accident hazard or cannot come up to the visual requirements of their job. Co-operation among employees, however, has been good, and between 69 and 70 per cent of those needing correction have attended to it, according to Miss Richards.

Miss Richards uses an old psychological trick in getting employees with poor vision to see a doctor. When a given department gets all of its members' vision corrected, Miss Richards sees that it gets ample praise and good publicity, and thus appeals to the pride and competitive spirit of other departments to measure up to the example set.

The testing is administered for old employees at the first aid station of each plant by the trained nurse there. At plants without first aid stations, the personnel assistant does the testing, and job applicants, of course, have their eyes checked at the central employment office when they apply for work.

The matter of test administration is very important, according to Miss Richards, for the key to the whole accept-

ance and success of the program lies in the hands of the test administrator, she says. If a person is approached with sympathy and understanding and a genuine interest in his problems, he is much more likely to co-operate in the improvement of his own vision, she says.

In giving the tests, Cone Mills uses the Keystone Tele-Binocular testing machine, one of which is placed at each first aid station. When an employee is found to have faulty vision, he is referred to the optometrist or ophthalmologist of his own choice, and he takes with him the findings of the test administrator which are recorded on a special chart for the doctor's information. After the person has been fitted, his eyes are again tested at his plant and the findings recorded on another form and kept on file for any future references necessary.

Human as well as material benefits are gleaned from Cone's eye program. For example, a young man was training for the job of spindle plumber under the direction of his father. Though the young man was obviously quite bright, he couldn't quite seem to master the work his father had been doing for years. Thus, he was filled with thoughts of failure and inferiority, while his father was, of course, perplexed. The father appealed to Miss Richards for help in determining what was wrong with his son, and a check of the young man's eyes quickly showed him to be lacking normal depth perception, a prerequisite for the job in which he was training. Naturally, he has changed to another department, thus increasing working efficiency, as well as the happiness of the family concerned.

Incidentally, as soon as the young man was told that he lacked depth perception he exclaimed, "Now I know why I had that wreck," referring to an automobile accident he had had sometime back, in which a mistaken perception of distance had been the causal factor.

Another young employee discovered with faulty vision was sent to have his vision corrected. A check revealed, however, that the trouble lay not in his eyes but in his teeth, and when a bad tooth was pulled it was only a matter of time until his eyes had returned to normal. Another employee was found, after referral to a doctor, to be suffering from optic atrophy; that is, his optic nerve was dying. Though there seemed to be little that could be done for him, doctors are still working on his case.

Perhaps the most striking example of the value of good vision in the prevention of accidents is illustrated by the example of the employee who had suffered the same accident at the same machine involving the same finger three different times. Since he has had his vision corrected, the accident has not been repeated.

In carrying out the eye tests, some employees have been found to be colorblind, and where they were employed in work where good color vision was desirable or necessary, they have been transferred to other departments where color vision makes no difference.

Illustrations of increased employee enjoyment of leisure time are numerous. The ability to follow the ball at a baseball game and to enjoy the movies and reading has added much to the happiness and well-being of many Cone employees. There is even one instance in which a man can now enjoy rabbit hunting again, after losing out on this sport because of faulty sight.

The effect of the eyes on the emotional make-up of a person, and vice versa, is an accepted fact in the field of optics. Thus, as Miss Richards points out, even if an employee's vision is good enough to enable him to do his job, if he has to squint and strain both at work and at home, he will not likely be the quietly confident person he would otherwise be, and his work will suffer from it.

T.Q.C.A. To Become Unit of A.S.Q.C.

The Textile Quality Control Association, at its recent Spring meeting in Clemson, S. C., voted to become the Carolinas Section of the American Society for Quality Control. Negotiations for the affiliation are nearly complete. Members of T.Q.C.A. are being urged, when applying for membership in A.S.Q.C., to apply for membership in the textile division. The membership of the division as of April stood at 161 persons.

The next meeting of A.S.Q.C. will be held May 27-29 at Philadelphia. Members of T.C.Q.A. have been invited to attend. There will be a joint conference of the textile division (Georgia, Tennessee, Birmingham and Huntsville sections) in Chattanooga, Tenn., Nov. 12-13. The textile division is planning to hold its own national conference in January or February 1954 at some central location yet to be selected in an Atlantic seaboard state.

Gardner M. Hailes of Avondale Mills, Sylacauga, Ala., is chairman of the A.S.Q.C. textile division; Cleveland L. Adams of Alabama Polytechnic Institute, Auburn, is vice-chairman. R. C. Tanner of Fieldcrest Mills, Spray, N. C., is president of the Textile Quality Control Association.

Southern Yarn Group To Meet Sept. 18

The Southern Combed Yarn Spinners Association will hold its 28th annual meeting Sept. 18 at the Hotel Charlotte in Charlotte, N. C., it is announced by C. C. Dawson of Gastonia, N. C., secretary.

STUDY SAFETY TECHNIQUES—Charles Alexander, manager of the industrial department of the National Safety Council, shows a recent council safety poster to five safety specialists from West Point (Ga.) Mfg. Co. The five men were in Chicago attending the advanced course in safety management techniques at the council's safety training institute. *Left to right* are Mr. Alexander; James Strother, director of employee insurance and safety; Boyce Fant, safety director, Lanett Mill; Marshall Lane, safety director, Langdale Mill; I. L. Murray, director of training; and Willard Heggood, safety director, Shawmut Mill.

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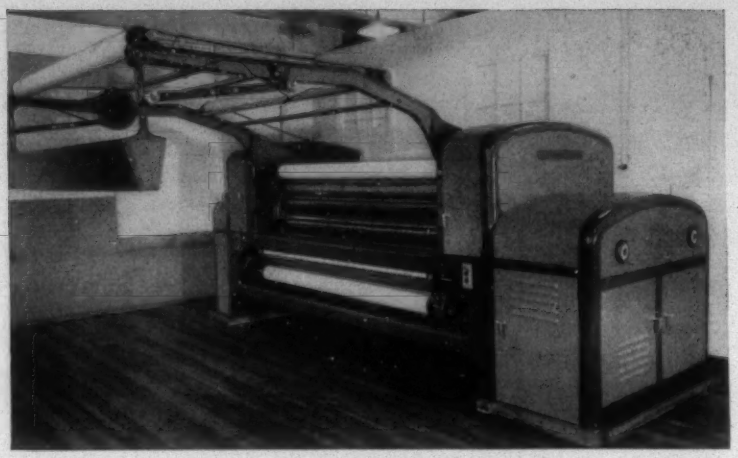

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South Carolina S.T.A. Hears About What's New In Opening Machinery

THE first part of the Spring meeting of the Southern Textile Association's South Carolina Division (held April 4 at Spartanburg) offered descriptions of three relatively new items of opening equipment—The Super Jet cleaner, discussed by A. P. Aldrich of Greenwood, S. C., president of Aldrich Machine Works; the S.R.R.L. opener, discussed by Ralph A. Rusca of the Southern Regional Research Laboratory at New Orleans, La.; and the Shirley opener, discussed by F. E. Bozeman of Charlotte, N. C., Southern agent for Atkinson, Haserick & Co. Below are abstracts of their remarks, followed by questions and answers which came from the floor.

The Super Jet Cleaner (Aldrich)

A few years ago sledded cotton was very inferior stuff. When the mechanical pickers came out it was found that they could pick cotton very quickly, and very dirtily, too. When a gin was equipped to take care of mechanically picked cotton it could also take care of the sledded cotton. I think if you gentlemen were to travel through the Western cotton section you would be astounded at the frightful stuff that is hauled to the gins in the name of cotton. It does not look like cotton, at all; it looks like stuff that you sweep up out of your back yard.

A few years ago we realized that we should have to do something about pre-cleaners. About that time several different machinery manufacturers decided that after-cleaners would be desirable, and the first thing they turned to was the saw-type lint cleaner. That came out about four or five years ago. Some of you will remember the Re-Gin; putting cotton through it is doing nothing more than putting it through a glorified picker.

All of our experience with these saw-type cleaners in handling cotton has caused us to become extremely allergic to saws. There is no way to get the lint off the teeth. On the card, of course, you have the saw; and no one has figured out any way of feeding cotton to the card other than that.

If you imagine a bale of cotton to have, say, one million pieces of foreign matter in it, and you put it through a cleaning process that breaks up those one million pieces into five million pieces and take out four million of them you have apparently done a wonderful cleaning job, because there will be a great lot of trash in your cleaning box or mote box. But you are worse off, because there are one million parts left in the bale of cotton which are so small that they get harder and harder to take out. In our experiments we hit upon a rather ingenious idea which has been developed into this machine known as the Super Jet cleaner.

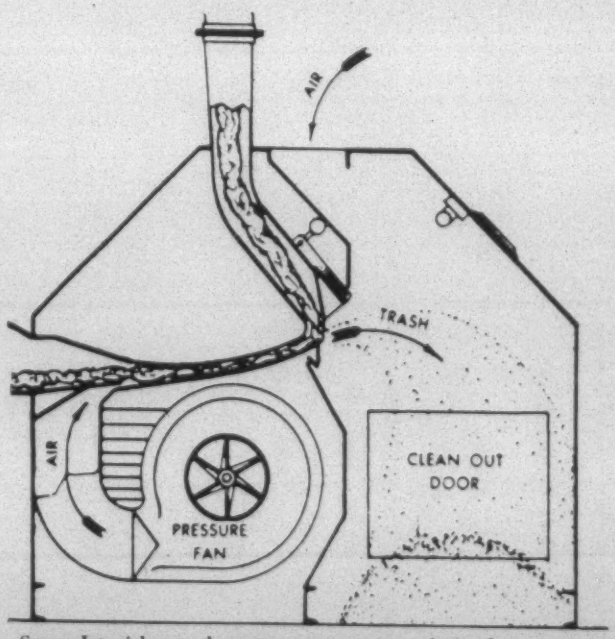
This machine was designed to clean the cotton entirely with air streams. We know that cotton can be cleaned effectively with licker-ins and the Re-Gin and so forth, and we know that cotton can be cleaned with saw-type cleaners. But some of the largest cotton buyers in the United States have clauses in their contracts flatly refusing to purchase cotton that has been put through a saw-type cleaner. It has also been found by some of the biggest cotton people in the world that the waste from the saw-type cleaners is very rich in fiber.

The head of the largest cotton laboratories in the United States told me recently that they found that saw-type cleaners threw out 75 per cent of lint in the waste. So we thought if there could be developed some way of cleaning cotton without using these harsh mechanical cleaners we would like to do it.

Our machine operates on the basis of two old and very well-known principles of physics. One of them is Newton's law of motion, which says that any object once set in motion tends to move in a straight line indefinitely unless acted upon by some outside force. The other principle is the principle of kinetic energy, which says that kinetic energy is exhibited whenever a body is set in motion and that it is measured by the product of the mass of the body into half the square of its velocity. If any of you have ever been in an automobile which ran into a telephone pole while proceeding at the rate of five miles an hour you know that the force of the impact probably would be sufficient only to dent the bumper. But if your car is proceeding at a speed of 50 miles an hour and runs into a telephone pole the force of the impact is not ten times as great but one hundred times as great.

It has been known for centuries that if you want to separate light particles from heavy particles you merely need to speed them up and then change their direction. You can go back to the Book of Ruth for an illustration of that. People knew then that if they took heavy grain and threw it into the breeze the light chaff would be blown away and the grain would fall to the ground. That is exactly the principle we have used here.

Utilizing the first principle, Newton's law of motion, if you take well-opened cotton and put it into a stream of air it will tend to move ahead in a straight line. We got the best cleaning when we used the type of opener that seems to separate the trash from the lint. The vent is 5/16-inch wide and 46 inches long;



Super Jet picks up the cotton on a stream of air, floats it to a sharp angle where an aperture strips out the trash. The cotton is picked up by another stream of air and carried to the next operation. This is the basic principle of this cotton cleaning device, which has no moving parts.

the air comes out of the vent at 16,000 feet a minute. It picks that lint up and drives it at terrific speed over this curved plate. That is where Newton's law of motion comes into play. You take the mass of loose material that you want to separate and throw it against the curved surface. According to Newton's law of motion it wants to go ahead but when you throw it against the curved surface it changes its direction. According to Newton's law of motion the heavier stuff, having the greater momentum, will tend to settle to the bottom. That mixture of cotton and trash going over the curved plate, with the lint on top and the heavier stuff on the bottom, strikes the hairpin turn; and therefore there is a definite attempt on the part of the trash to fall out if it can. The essential feature of this machine is that when this rapidly moving material reaches the turning point there is a suction and a pressure that forces it upward at a terrific rate of 10,000 or 11,000 feet a minute. When it passes through, those little particles have the effect of bullets. That is what gives bullets their penetrating power. The penetrating power is always proportionate to the square of the velocity. At that terrific speed those particles develop a good deal of what physicists call kinetic energy. So all we have to do is separate the light from the heavy stuff. Consequently we have a suction fan. There is a fluorescent light which illuminates the whole thing brilliantly. You simply adjust a knob here for the kind of cotton you are going to run, setting it to increase or decrease the velocity of the air in the machine. You blow it up at such high speed that everything wants to keep on going. Then, if that barrier is enough to deflect the lint but not enough to deflect anything heavier than lint, anything heavier than the lint—and I mean anything and everything—will go out. In this machine we have separated nappy flock from threads 99.1 per cent effectively.

There is one peculiar thing about this machine. It cannot take out good staple. That is because this thing separates by the force of the air. If you set the machine to take out any good fiber at all it will soon fill up this mote box. It will either not take out any or take out so much that this mote box fills up right away.

The S.R.R.L. Opener (Rusca)

The problem of textile cleaning, as Mr. Aldrich has said, has become very acute in the last ten years because of mechanical harvesting. It is the same old story of a mechanized production line—a decrease of production costs but some lowering of quality. That is what is happening on our farms today.

Without going into figures, I think it is well known that the number of on-the-farm laborers has deccreased greatly in the last ten years, and migrant labor has come into the picture. These years have seen a trend toward the use of machines, and the mechanical picking of cotton has increased with startling rapidity.

Up to about 1947 there was practically no cotton picked mechanically. In 1948 we had approximately one per cent, or about 150,000 bales, of machine-harvested cotton. That was both spindle-picked cotton and sledded cotton. Without going into all the figures, we are right at or a little above one-fourth of the whole cotton crop being mechanically harvested. That has come about in five short years. I would call that not a trend but a real development.

The farmer has to put in mechanical pickers because otherwise he cannot get his cotton picked. Regardless of what the production has been in the crop years from 1947 on, the mechanically-harvested portion has climbed right up. So that is what we are faced with.

The National Cotton Council has said there are in use now about 31,000 strippers and pickers. The major portion of that mechanization, of course, is being done in California. I was out there in October of last year, at the Beltwide Mechanization Conference, and heard very well-qualified men say that in five years there would not be a hand-picked bale in the state. In Texas the percentage of the crop mechanically harvested is about 20 per cent; in Oklahoma, 19 per cent; and in Mississippi, roughly, 20 per cent. These are estimated figures, but I think they are fairly accurate.

So the textile industry is faced with processing increasing quantities of machine-harvested cotton, much of which has a heavy leaf and heavy grass content. The cotton ginners and the manufacturers of ginning equipment have done a remarkably good job so far, but it takes time to equip eight or nine thousand gins with the modern machinery that is necessary for the adequate cleaning of mechanically-picked cotton.

The development of the S.R.R.L. cotton opener was the first step in a carefully planned program on cleaning at the Southern Regional Research Laboratory. The purpose of opening equipment is to open the cotton, to fluff it up, to put it in an even more open condition than it was at the cotton gin before it was baled. We find that with the use of this machine the cotton is 25 per cent more open than it originally was when baled at the gin. The purpose of it is to enable the present equipment you have in your mills to do a better job of cleaning, to get out more trash, and to save more fiber. The machine was not designed to be a cleaning machine in itself.

The fluted rolls accept the cotton usually from the end feed table. The cotton goes on the belt and is moved over to the first of a series of five-tooth cleaners. They may be gin saws, but they have a special type of teeth that we have designed. They are all moving at the same speed. The cotton is impaled on the bottom teeth and carried to this point. A certain proportion of it remains on the teeth and goes between the gap, which is one-eighth of an inch. Therefore the maximum size of tuft you can bring through that machine is one-eighth of an inch thick. Actually it is a little less than that, because the top cylinder will strip off any excess. Actually you can have a tuft 1/16-inch in size going through. It is mechanically impossible for any large tufts to go through. As the machine works these teeth revolve, bringing about a tuft on each tooth. The last tooth is a little larger. We call it a kick-back, for lack of a better term. Within a matter of two or three seconds you have formed in the box a revolving roll, a very soft roll. Ordinarily the cotton goes around one and one-half times before it goes out the back side. That is where we doff the cotton.

The teeth kick the cotton into a duct. Air is let in at one of two points, because you have to have air to carry it on to the next process and carry it to some standard condenser. It requires about 4,000 cubic feet of air a minute to handle 2,000 pounds of cotton

Pittendreigh Heads So. Car. S.T.A.

W. M. Pittendreigh, superintendent of the Riegel Textile Corp. cotton mill at Ware Shoals, S. C., was nominated and unanimously elected chairman of the South Carolina Division of the Southern Textile Association when the group concluded its Spring meeting April 4 at Spartanburg. Mr. Pittendreigh succeeds James A. Chapman Jr., manager of Riverdale Mills at Enoree, who served as chairman of the group for two years.

per hour. The rate of production on long staple is 2,000 pounds an hour, and it will do better than that on short staple.

I believe that covers the principle of it. Now, we asked a number of mills for practical data out of the mills. You have perhaps seen the results of the Southern Laboratory—what we found in the laboratory, but you know there is a big gap between laboratory results and mill results. So to bring you what is occurring in the mill we have asked some representative mills working on various grades for their data, and those results are what I should like to present today. Part of these data is made available through the courtesy of the Swift Mfg. Co. of Columbus, Ga.; part through the West Boylston Mfg. Co. of Montgomery, Ala.; and part comes from the Joanna (S. C.) Cotton Mills Co.

The data from Swift show what is being accomplished in processing low-grade, shorter-staple cottons on the opener. The percentage of waste in opening was the same without and with the opener, in picking it was 0.4 less with the machine; and in carding the waste (except strips) was 0.5 per cent less. The picker lap was one per cent cleaner. The saving in fiber, by using the machine, was fully five per cent in opening and three per cent in picking. That is a saving in spinnable fiber as determined by the Shirley analyzer. They consider, I believe, that they are saving two dollars a bale. That takes into account cleaner stock and saving in fiber. The yarn skein strength went up about five per cent in this particular instance, which was attributed to a little more uniformity and better blending.

West Boylston is processing low middling cotton, 1 1/32-inch. I do not see any difference in the total amount of waste or in the cleanliness of the picker lap. There was some fiber saving but not additional cleaning. I am told that there was not adjustment at all made on the pickers. The use of this machine usually requires some adjustment on the pickers, in closing up of the grid bars. The cotton is so much more fluffy that it falls out more readily. Therefore we recommend closing up of the grid bars and the use of a little less air. It is not something you can throw in in a few hours. Swift, I belive, worked on it for three months to get their saving of two dollars per bale.

All these results were being determined by the Shirley analyzer, the determinations being made in the laboratory; West Boylston does not have a Shirley analyzer. At West Boylston the yarn number was 12; the actual size was 11.93 when the skein break was corrected back to the yarn size. There is little difference, as I see it, in the results on the yarn made from low middling cotton; in the case of middling cotton there was about a three per cent increase in yarn strength.

This represents, I think, a test of 30,000 spindle-hours. That yarn was sent to the laboratory for analysis on our Uster tester and indicated that there was a very decided decrease in the coefficient of variation of size on the low middling; there was no difference in the yarn grade. On the other cotton, middling, there was no marked increase in uniformity but a slightly better grade. The size was measured in the laboratory by the usual method of measuring diameter. I think it is 20 samples each of 200 bobbins that went into this test.

Joanna Cotton Mills has a couple of these machines. They are laid out in the usual line. Comparison tests were made on adjacent picker lines handling the same stock, which was strict middling 1 3/32-inch cotton. That is pretty good cotton.

The percentage of waste with the cleaners and without the opener is higher—1.17 per cent as againt .55 per cent with the opener, or a difference of .62 per cent. The Shirley analyzer test, they tell me, on this line with the opener, showed ten per cent less spinnable fiber in the waste than on the line without the opener. So they regard that .62 per cent as being a true saving in spinnable waste, and they estimate that the saving per year amounts to $22,400 worth of cotton in the picker room alone.

The lap uniformity was a little better, 98.2 with the opener as against 96.6 without it. The I.T.T. percentage of non-uniformity is slightly greater with the opener, 10.7 as against 10.5 without it. I do not know whether that is regarded as being significantly higher or not. It would say not, but there it is.

Now, as to the carding data, the waste from the flats was 13.3 grains without the machine and 13.1 with it. The fly waste amounted to 2.0 ounces per hour without the opener and 1.9 ounces with it. The neps were 40.2 per 100 square inches without the machine as against 38.4 with it. We are told by the mill that the latter figure represents a significant decrease in neps. The card sliver was a little more uniform, and the drawing sliver a little more uniform.

As I said, we still regard this as an opening machine and not a cleaner. We are still working on it, and we are still working on the problem of developing cleaning equipment. There are in progress studies of cleaning by ultrasonic forces and electrostatic forces, as well as by mechanical forces. I am sure you have all heard of cleaning cotton electrostatically and by ultrasonics. We do not feel justified in attempting it until we know more about it. Studies of electrostatic cleaning are being made at Clemson College under the supervision of the Southern Laboratory. It is hoped that in the future the possibilities of aerodynamic methods and possibly hydrodynamic methods can be explored, as well as ultrasonics. So far it is known that different sound waves affect cotton differently than they do trash.

We are in process of building an extension to convert this equipment into a cleaner. The work is in its earliest stages, but we have been successful on a pilot unit about two feet wide to take out the trash in the cotton on one piece of equipment. It is a long, long way from the pilot-model stage in the laboratory to a full-scale pilot-plant model, and is a still longer step to a textile-mill model. So we do not anticipate anything out of this development for several years, but we are attempting to engineer it. It will take time. Any cotton openers in the industry, and there are some 27 models of them now, will not be affected by it. We are attempting to build something to put on the back of the cotton picker, and that will not be accomplished over night. Believe me, it is a real chore. It is not something that we expect to jump into and solve immediately; we are not that foolish. But I do hope that the work at the laboratory will in the next three or four or five years result in something that will be of dollars-and-cents value to you people in the mill.

The Shirley Opener (Bozeman)

The Shirley analyzer is so accurate in its removal of trash and short fibers that it is easy to figure the amount of foreign matter and short staple in any given sample. Its production, however, is suited only for the laboratory, and the machine is totally unfit for mass cleaning of cotton.

Due to a world-wide demand that a production machine be developed along the principles of the analyzer, the Shirley Institute after long development and hundreds of tests has come forth with the Shirley opener. This machine's principle of operation is based upon the Shirley analyzer, and it will replace approximately four cleaning media of the conventional type. It is now possible for any mill to reduce its opening and picking lines to only hopper feeders, Shirley opener, and a single beater picker using a Kirshner or carding beater.

With this short line of opening, cleaning and lap-making the cotton is not subjected to the harsh treatment of continuous beating that is necessary in the opening and picking machinery familiar to all of us.

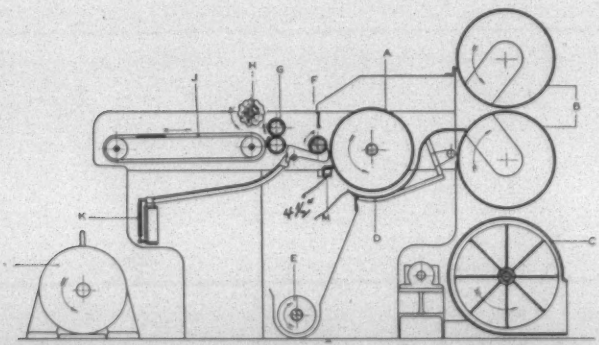
The Shirley opener differs considerably from the usual type of opener. Instead of the traditional beating media, it utilizes a licker-in type of beater or combing cylinder approximately 15 inches in diamteter. This beater or combing cylinder is covered with saw-tooth wire of a special design. The usual grid bars below the beater are replaced by a plain adjustable sheet of metal, which serves to separate the cotton and trash.

The cover above the cylinder is of special design so as to eliminate regions of high air-pressure and permit stripping of

the cylinder without the use of a stripping edge or cutoff plate. The cotton then passes along the feed lattice through compression rollers and on to a pedal feed arrangement. The beater or cylinder covered with saw-tooth wire virtually combs the cotton from the feed roll in individual fibers or very small tufts and in doing so aims at a complete dispersal of trash and short fibers. The mixture of trash and short fibers passes downwards close to the cylinder and in this manner past the stripping edge. After this point, where the stream of material diverges, there is a "free space" of approximately 4½ inches in length. The heavier particles of trash tend to fall, and the more buoyant cotton fibers follow the air stream. Following this free air space is the leading edge of the streamer sheet. The position of the edge in intercepting the mixed stream of trash and cotton enables the heavier particles of trash on the outside of the stream to be separated from the lighter material traveling nearer the cylinder. The droppings rejected to the bottom of the compartment are removed to the outside of the machine by means of a revolving scroll.

The position of the leading edge determines the quality of the droppings, and it can readily be adjusted to suit the degree of cleaning required. The two cages are exhausted by the fans, and the suction through the cages serves to draw air in between the separator sheet and the cylinder and through the gap immediately above the feed roll. Buoyant material is carried in the air stream up to the cages. Any small particles of fiber still adhering to teeth are removed by the stripping action of the pneumatic and centrifugal forces operating in the space between the cylinder cover and the cylinder. A gap arranged above the feed roll permits an opposing air stream to enter at this point, preventing an accumulation of cotton at the feed roll. The relatively high speed of the cages means that a good amount of the cage surface is entirely free from cotton. This insures that the dust laden air is effectively carried away. The evolution of the Shirley opener was determined by the acceptance of the principle that repetitive opening and cleaning action is largely ineffective, as it undoubtedly follows the law of diminishing returns. It would follow that the most effective method of cleaning cotton is therefore a highly efficient opening line, using a few very effective machines and with control over the liberated trash.

Extensive tests of the various types of beaters and comparisons of the cleaning efficiency of each finally led to the adoption of the "licker-in type" of beater. The superiority of this type of beater is very marked, and it is due to the finer opening and combing action of this beater as compared with the conventional types. Extensive surveys of the various classes and density of teeth in relation to beater speed were carried out and the form finally adopted was the best for all conditions. The very high degree of openness which is achieved makes is possible to reject almost completely all the trash which is present, a thing which cannot occur with trash securely imprisoned within tufts of unopened cotton. The effectiveness of the method used to separate the trash from the lint is the outcome of a careful study of the forces involved. A particular point to note is that the cotton is not permitted to pass around the beater more than once, but is stripped pneumatically by the correct use and control of air currents. The air output of the machine is arranged to produce an area of low pressure above the beater, and the cover is suitably designed for this purpose. A stream of air in opposition to the air stream following round the beater creates the turbulance necessary to strip any remaining cotton on the beater. Cotton removed in this manner is drawn on to the upper of the two cages. In any installation, the Shirley opener would be used as the main cleaning machine in a line, including the machines necessary to feed the opener and make the laps. Extensive mill trials processing cotton and cotton waste have shown conclusively that:



The Shirley opener: (A) wired beater; (B) 18-inch diameter cages; (C) 19-inch diameter cages; (D) boundary sheet; (E) spiral waste conveyor; (F) feed roller; (G) compressor rollers; (H) wood roller; (J) feed lattice; (K) spring loaded pedal; (L) motor; (M) deflector plate.

(1) A short sequence of machines including the Shirley opener is as effective in cleaning and more effective in opening than a much longer line of traditional machinery.

(2) Advantages evident at later stages in processing are less card waste, less dirt on roll beams, and increased life for the card clothing due to the perfectly opened laps obtained.

(3) Yarn appearance, using the Shirley opener, is fully equal to that obtained by using regular opening lines. No loss of yarn strength is experienced, and there is no tendency to damage the fibers. Furthermore, the Shirley opener does not lead to more neps.

(4) The Shirley opener is a striking success in processing cotton waste. In mill trials lasting over several months the opener consistently achieved better than 60 per cent more cleaning compared with a cleaning figure, for the same lint loss, which was as low as 20 per cent for some classes of waste processed on regular waste machinery.

Unfortunately, the delivery of this machine is just about a year off. We have a world-wide market for it and are about a year behind in our orders.

It has long been the dream of every mill man to handle cotton, if he possibly could, without beating. It has been said that if a bale of cotton were given to an engineer and he were told to destroy it completely the first thing he would do would be to beat it and squeeze it. Beating does destroy cotton.

If you are blending cotton or blending synthetics the feed rolls can all be run at the same speed, or at any combination of speeds if you want different percentages of cotton and synthetics in the blend. Then you go to the Shirley opener and the one-beater picker. That is the latest design of cleaning machinery that has been developed. That outfit will give you the cleanest cotton of anything we know. Depending on the degree of cleaning that you want, the setting can be adjusted.

Mr. Aldrich: What happens when a mote about five times as big as your setting is caught on the saw?

Mr. Bozeman: I cannot answer that question because I have never seen one. The Shirley Institute claims that, due to the special design of the teeth, it will not load up.

Mr. Aldrich: I was not thinking of its loading up; I was thinking of the physical effect of feeding something that is five times as big as the setting.

Mr. Bozeman: It will tear up your motor, all right. It is on the same principle as the Shirley analyzer.

Mr. Aldrich: But the Shirley analyzer is not trying to produce lint that you can spin. On the Shirley analyzer you have a much closer setting than you have on this machine. I was curious to know what your setting was, because we tried substantially the same thing. It took out a tremendous amount of trash.

Mr. Bozeman: They say the Shirley opener will not produce neps and that any neps in the cotton coming from the Shirley opener were in there before the cotton got to it.

Mr. Aldrich: Those neps are a very serious problem. It is due to the fact that all this pre-cleaning in the gin has broken up the neps and thrown them around. It has been brought out, also, that the boll-weevil problem has a close relation to the problem of neps, in that the poison used for boll weevils also poisons the insects that pollinate the cotton. That condition is going to continue and get worse, they tell me, unless the farmers take to raising bees to pollinate the cotton.

Mr. Bozeman: The English, I am told, get by far the worst cotton that I know of. They use a lot of short Indian cotton and a lot of short cotton from South America and Africa. The cotton is very dirty, although it is not mechanically picked. They say the Shirley does a good job on that exceedingly dirty cotton and that short cotton they get over there from India and South America and Africa, and also the short American cotton which the mills in America reject.

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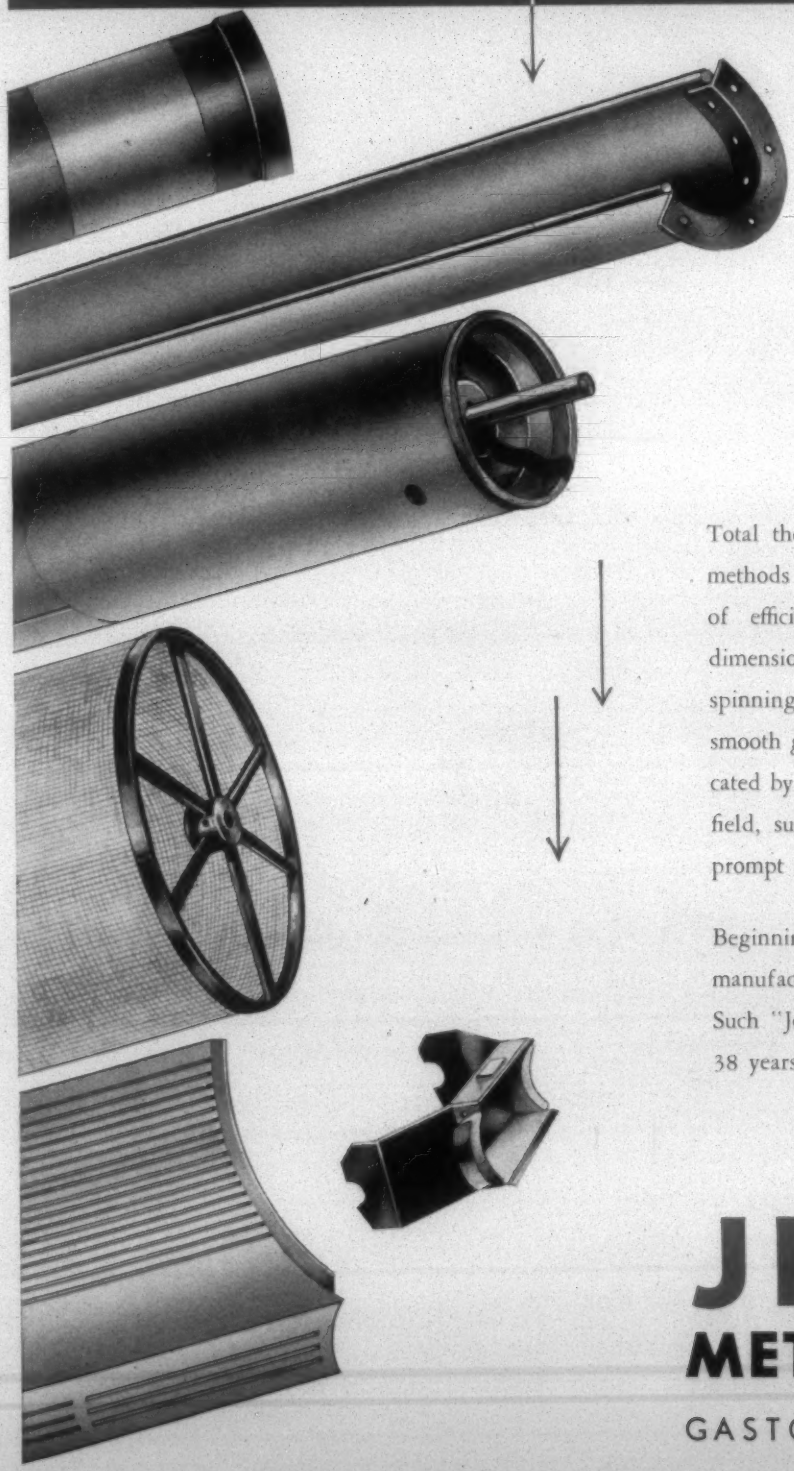

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DRY SIZE OR PASTE?

By C. B. KINNEY, Manager of Textile Sales, E. F. Houghton & Co.

DESPITE the increasing production—and promotion—of man-made fibers, cotton still remains "king" in the textile industry. Even though many of the newer synthetic fibers are said to possess properties that natural fibers cannot equal, the reverse is also true. Cotton has many characteristics that man-made fibers have not yet been able to duplicate. Consequently, it can be reasonably expected that cotton will continue to head the list of processed fibers, either by itself or in combination with other fibers. (In 1930, 85 per cent of all fiber processed was cotton. In 1953, it is estimated that cotton will represent 70 per cent of the total.)

As in the past, the manufacturer of cotton fabrics must continue his efforts to produce the highest grade fabric at a minimum cost, if he wants to remain in business. However, his problems along this line are now more complicated because he must take the new synthetic staples, combine them with cotton, and produce new fabrics and new styles.

Proper slashing of the warps, as every cotton weaver knows, is one of the most important operations in the mill. On this operation depends weave room efficiency and the quality of the finished fabrics. Both of these factors have a tremendous influence on his costs and the sales appeal of his finished goods.

No operation in the mill can be slighted or called unimportant, but even the best yarns, when off to an improperly sized start on the slasher, cannot produce good fabric at reasonable cost. That is why the cotton weaver attaches so much importance to this operation. That is why he is always on the lookout for improvements in materials, equipment or methods to increase slashing efficiency.

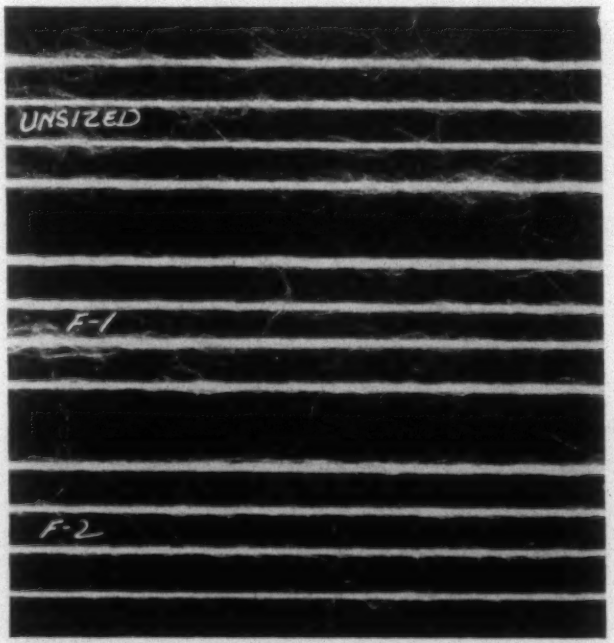
Naturally there have been great advances in slashing over the years. Equipment has improved; modern slashers use accurate temperature and humidity regulating devices; rust-proof cooking and homogenizing units; and new chemicals and processing material for use in the size bath.

One of the first commonly used sizes was composed of starch, which is still being used today in modified forms. Starch, while it protected warps from abrasion on the loom and increased warp strength, was found to be harsh, brittle and non-absorbent. It was evident that another ingredient had to be added to provide a smoother, more flexible film to the warps. In the early days, beef tallow was used to produce the desired results and for a number of years it was the standard softener employed with starch for sizing cotton warps.

As the industry progressed and finer fabrics were developed using improved equipment and higher speed looms, combinations of other fats, waxes, oils and chemicals were employed to produce better sizing. This gave rise to the production of size softeners and compounds. A number of chemical houses placed prepared sizing compounds on the market and today a large number of such compounds are regularly sold.

Most all of these compounds are in paste form. The paste may be a semi-solid consistency or it may be in the form of a semi-flowing paste. The reason most of the compounds are found in this form is because in blending the various ingredients found in such compounds it is usually necessary to employ water, emusifying and thickening agents in order to produce a smooth blend.

Today, many different types of starches and modifications of starches are being employed in slashing but irrespective of the type of starch employed, one of the most important ingredients is the size softener or compound employed. This has been proven many times by using the same



This photomicrograph, a 16-times enlargement taken in the textile laboratory of E. F. Houghton & Co., presents visual evidence proving how sizing affects yarn. Unsized strands are shown at *top*. A paste-type sizing compound was used on the *center* set of warp threads (F-1). At *bottom* (F-2) are threads sized with powdered Houghto-Size 475 and show improved fiber lay and smoothness. Strictly controlled tests indicate the importance of efficient sizing. Results of this typical test are as follows:

	Unsized	F-1	F-2
Moisture (as received	4.2%	4.8%	7.3%
Moisture (as received)	4.2%	4.8%	7.3%
Boil off	5.3%	16.1%	17.8%
Size added	....	10.8%	12.5%
Breaking strength—pounds	3.3	5.3	5.6
Increase in break strength	....	60.5%	69.8%
Count	4.5/1	4.3/1	4.2/1

formula but merely varying the type and quantity of size compound, and obtaining greatly different results in weaving. There is only one sure way of determining whether the slashing has been satisfactory or not and that is by results in the weave room and the finished fabric.

On the market today we now find the most recently developed size softeners and compounds in the form of dry powders. This form of sizing compound has been made possible by modern methods of manufacture which permit all of the ingredients forming the sizing compound to be manufactured in powdered form, including fats and waxes. The question naturally now arises in the mind of the weaver—what is the advantage of buying dry products in preference to paste compounds?

Looking at the matter entirely from an economic side, there is considerable in favor of the dry material. While it would be possible to put in dry materials, fillers and other materials which have no beneficial effect in sizing, one ingredient, water, must necessarily be omitted. An examination of a large number of paste compounds on the market will show that their moisture content runs from ten to 75 per cent of water. At present day transportation costs, water becomes an expensive item to ship.

A powdered size is more convenient in the slasher room as it is easily weighed out and handled in the sizing kettle. No material is left clinging to the sides of the container and all of the material purchased is utilized. A dry size containing no fillers or inert material is, naturally, more concentrated and requires a smaller quantity per pound of starch, cutting down both storage space and handling. Considering transportation, manufacturing costs and handling, the cost per kettle is materially lowered.

The mill operator, of course, welcomes lower costs but, if results are not satisfactory in the weave room and in the finished fabric, no economy is actually realized. The question then naturally arises, can he obtain as good results with a dry and powdered material? This question seems to have been very well answered by a number of mills who have regularly adopted dry size in their manufacture.

The reports from a number of mills who are using the dry size indicate there are many advantages in the use of such a product. They also state that in changing from a paste size containing considerable water, care must be used not to employ too large a quantity of the dry material. Many users of sizing compounds are of the opinion that a larger amount of compound in the sizing mixture will many times improve slashing. Irrespective of whether a paste compound or a dry one is employed, too much sizing compound is not beneficial and in most instances is detrimental. Naturally, with the powdered compounds which are more concentrated, the addition of more material than necessary, in many cases proves to be detrimental.

As far as the weaver is concerned, the first most important function that a size compound must perform is the production of warps that give high weaving efficiency and good fabric. The story is not ended here, however, because the fabric must undergo finishing operations after leaving the loom. If materials are used in the sizing compound that interfere with good finishing, whatever is saved or accomplished in the weaving is lost in the finishing. Care must be taken, therefore, that the sizing compound can match up to the requirements of the finisher. A large percentage of fabrics from the loom are boiled off or desized previous to the finishing operation, so any materials in the fabric that interfere with these processes complicate the finishing procedure.

Regardless of whether the sizing compound is a paste product or a dry powdered material, if properly manufactured it should contain no ingredients that will interfere in finishing.

Looking at the picture as a whole, it would certainly seem that the dry size offers the most advantage to the user from the economic viewpoint and if it is compounded by a concern having many years of experience with products of this kind, it should also be most satisfactory from an operating standpoint.

Some mills may expect that the change-over from a paste sizing material to a dry, powdered size will encounter difficulty. Those mills who have made this change, however, do not find this to be the case. The same type of equipment is employed in regard to cooking keetles, homogenizers, storage equipment, etc. In the many mills which have made the changeover, the only change that is made is the replacement of a warp size compound in paste form by a considerably less quality of the dry size. In many cases it requires about one-fourth to one-fifth the amount of dry size as paste size formerly employed.

The mere physical form of a product like a sizing compound is not the most important point to consider. Just because a size is offered in dry form does not mean that it is a good product or one that is more efficient than a product made in paste form. It is our opinion, however, that a dry size containing the proper ingredients is easier to handle, more economical to use and will produce as good or better results as the best type of paste compounds.

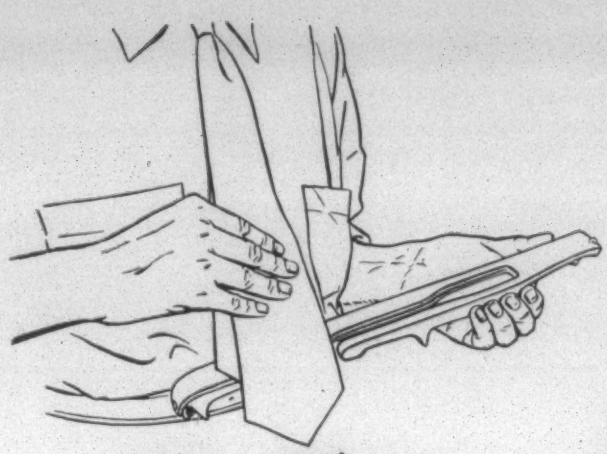
Increased Cotton Textile Exports Cited

Exports by the United States of cotton textiles have increased from 300 million yards before World War II to about 800 million yards annually since that time, John W. Murray, secretary-treasurer of the Textile Export Association of the United States and head of the New York office of the American Cotton Manufacturers Institute, recently told textile economics classes at the Philadelphia Textile Institute. With the exception of a dip to 559 million yards in 1950, this country has maintained a rate of about 800 million yards annually since World War II, he said.

The rise of new producing areas as various countries have expanded their home industries and depended less on imports has tended to adversely affect the total volume of overseas commerce, he said. Competitive conditions in international trade have become more intense in the post-war years, he noted. Re-emergence of Japan in recent years has placed her as one of the three leading nations with Great Britain and the United States in this commerce. Where the United States was low in the pre-war scale, this country now vies with Great Britain for first place, he said.

Society Told Blending Can Reduce Static

Members of the Fiber Society, at the group's recent annual meeting in New Orleans, La., were told that the blending of fibers in a given fabric can be used to avoid static problems, but only to a limited extent. This information was presented at a symposium on static by Jack W. Ballou of the Du Pont Pioneering Research Laboratory



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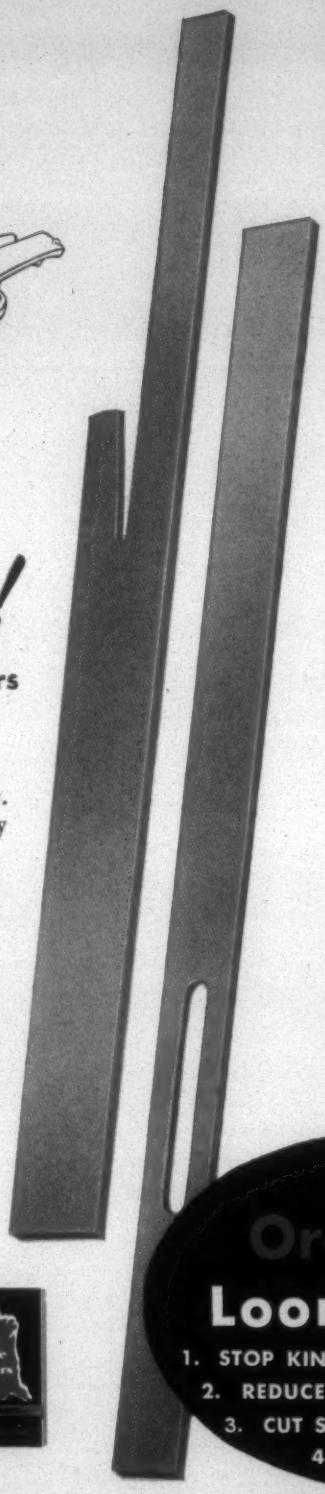
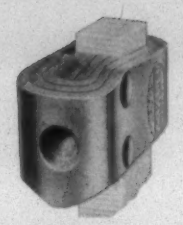
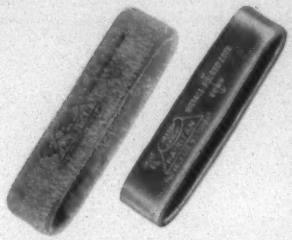




Pickmaster® Pickers do not bounce the shuttle, or cause the shuttle spur to heat up. Assure smooth shuttle flight and accurate boxing.



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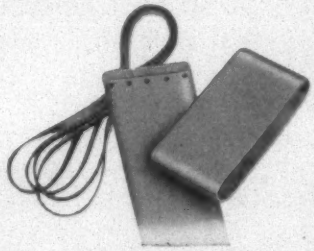

Condenser Tapes, Comb and Gill Box Aprons, and Grakorub Rub Roll Aprons are producing uniform rovings with less down-time. Made of selected G&K leather specially tanned and accurately fabricated in standard and special sizes.

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T-2

who offered a paper on results of a study of fiber properties as they related to the effects of static electricity in textiles.

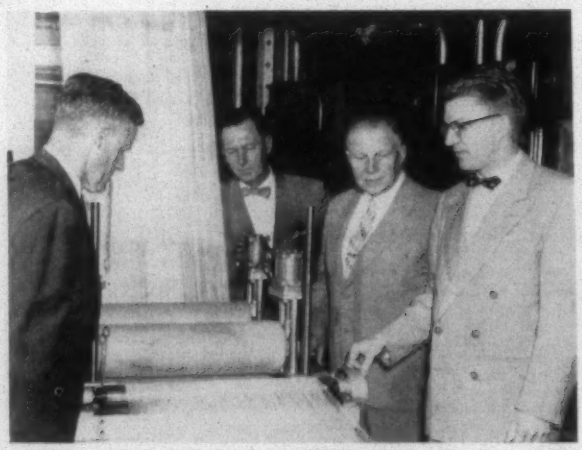
Dr. Ballou termed the three most important fiber properties affecting static build-up as (a) fiber area available for surface contact, (b) the type of electrical charge, and (c) how fast the fiber allows the charge to leak off.

Two instruments were used in the laboratory to measure the size, type, and the decay rate of static electrical charges, he noted, one for fabrics and another, especially designed, for yarns. By means of one of these instruments, an electrostatic series was established as follows:

Positive
Charge
- Wool
- Nylon
- Silk
- Rayon
- Cordura high-tenacity rayon
- Cotton
- Fiberglas
- Spun ramie
- Acetate
- Dacron polyester yarn
- Orlon acrylic yarn
- Saran

Negative
Charge

"From this series one can predict the type of electrical charges that will be developed when two fabrics are rubbed together under a certain set of conditions," he declard. "A fabric will receive a positive electric charge with respect to any fabric below it in the series, or a negative charge with respect to any fabric above it in the series.



S.R.R.L. EXPERIMENTAL SLASHER—R. J. Cheatham *(left to right)* and Mason DuPre Jr., Southern Regional Research Laboratory of the U.S.D.A. Bureau of Agricultural and Industrial Chemistry, are shown inspecting the experimental slasher at the laboratory with Hugh M. Brown, School of Textiles, Clemson (S. C.) College, and E. V. Painter, Johnson & Johnson, Chicago, Ill., during the Spring meeting of the Fiber Society at New Orleans, La. Mr. DuPre, Dr. Brown and Dr. Painter were chairmen of symposiums during the meeting. Mr. Cheatham was chairman of the local arrangements committee for the meeting, which 141 members and guests attended. The Southern Laboratory was host to the meeting.

"In certain blends, it was found that the electrical charges developed by the blended fibers neutralized each other. These blends showed no apparent static electric effect when tested against a specific surface in the laboratory," he continued.

"The different compositions required for neutrality, however, point up one of the drawbacks to blending for static reduction, namely, that the best composition varies according to the surface against which the blend is tested. Staple blending based on the electrostatic series is one way of reducing static in certain cases, but the method is limted.

"The most satisfactory method of blending was the one in which the fibers were mixed as intimately as possible, as in staple blends. Ply blends or weave blends were much less satisfactory.

"Some of the blends found essentially neutral when tested against a specific chrome-plated surface in the laboratory were: (1) A blend of nylon and Dacron polyester staple with somewhere between 40-50 per cent nylon was neutral to the chrome-plated surface. This blend was neutral to cotton, when it contained about 75 per cent nylon. (2) A blend of Orlon acrylic staple and about 20 per cent nylon was neutral to the chrome-plated surface. When this blend contained about 70 per cent nylon, it was neutral against cotton. (3) A blend of Dacron polyester fiber and 15 per cent wool was neutral against the chrome-plated surface."

Dr. Ballou reported that the tendency of a garment to cling is not always a measure of the amount of static generated. "Assume, for example, that a fabric is momentarily rubbed against the leg and then is separated, so that it is charged on its lower portion," he said. "If conditions are such that the charge can diffuse over the fabric surface in a short time, then it is possible for the charge to redistribute itself to a non-troublesome concentration, and clinging may disappear. It is important, therefore, to realize that clinging is not necessarily a good indicator of static development, although its practical significance cannot, of course, be discounted."

Dr. Hugh M. Brown, dean of the School of Textiles at Clemson (S. C.) College, served as chairman for the symposium. It was announced that the Fall meeting of the Fiber Society will be held Sept. 10-11 at Lowell, Mass.

New Fiberglass Fabrics Made Available

Over 100 new fiberglass fabric constructions for the drapery and curtain market have been developed by Hess, Goldsmith & Co. Inc., weaver of glass fabrics, it was announced recently by William P. Colton, general sales manager for the company's decorative and industrial fabrics divisions.

Recent consumer surveys have indicated that women are shopping for draperies and curtains with certain characteristics which are inherent in glass fabrics, Mr. Colton said. These include ease of maintenance, including the no-ironing features; fireproofness; dirt-resistance; and sunlight resistance. Consumer preferences indicate that fiberglass draperies should enjoy their biggest market to date next Autumn, he concluded.

"Wanted to buy: Mule: must be reasonable."—Classified ad. Anybody who doesn't know any more about a mule than that had better buy a horse.—*Cincinnati Enquirer.*

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By F. O. STONE – Part Four

VAT dyestuffs are descendants of natural and synthetic indigo and the name "vat dyes" was derived due to the dyeing of indigo in tank or vat-like containers.

The first of the vat-type dyestuffs were developed about 50 years ago largely through German, Swiss, French and English chemical ingenuity after the manufacture of synthetic indigo was carried out. Vat dyestuffs are grouped into three classes as to their chemical origin; these being Indigoid (closely akin chemically to indigo and sulfur dyestuffs), while the Anthraquinone and Carbozol vats are usually considered the "vat" class of dyestuffs, since they possess the over-all highest fastness ratings.

Vat dyestuffs are of pigment nature, insoluable in water and possessing no direct dying action on cotton, viscose rayon, wool and other fibers until they have been reduced through the use of an alkali (causic soda) and hydrosulfite.

In the reduced (leuco) condition, all types of vat dyes may be applied to the cellulosic fibers, after the dyeing operation has been completed to the "reduced vat" on the fiber or fabric is oxidized and this returns the vat dye to its original pigment form but "dyed and fixed" on and within the fiber. In this oxidation, the vat dyestuff if the dyeing operations are carried through properly, return to the original color of the pigment vat dye.

The three classes are reduced and dyed at different temperatures and conditions, ranging from 180°-200°F. reduction for thioindigoid and indigoid with dyeing at 140°-180°F. The carbozol and Anthraquinone have been grouped at 120°-140°F. for reduction and dyeing at 80°-140°F.; these are two vat classes that are known as the "hot" and "cold" dyeing vats.

As this series of articles is devoted to level dyeing operations, only brief reference will be made to the well known facts that vat colors for dyeing operations are largely reduced through use of causic soda as the alkali and sodium hydrosulfite as the reducing agent whereas on the printing of vat colors potassium carbonate is used as the alkaline agent with one of the formaldehyde sulfoxylate compounds as reducing agent. The reduction of printing occurs due to the action of the steaming operation.

During the past ten years there has been partial adoption of "vat printing procedure" on vat dyeing, dyeing through Du Pont's pad-steam continuous processing unit which pads on the vat colors in pigment form, dried or partially dried, then runs pigmented goods through chemical baths consisting of alkali and hydrosulfite plus sulfoxylate then into a steaming chamber and onto oxidation and soaping-off boxes ready for drying.

The dyeing of vat colors may be grouped under several general headings. (1) Yarn and raw stock dyeing: (a) reduced method; (b) pigment method; (c) recently there has been introduced a proposed continuous raw stock or staple dyeing process, this is still in a period of devolopment. (2) Piece goods dyeing: (a) jig dyeing, reduced method; (b) pad-jig method (padding on vat pigment, entering on jig, reducing dyeing and reducing dyeing and finishing off); and (c) piece goods continuous operation.

The continuous dyeing of vat colors of piece goods started with the pad-jig method through additional jigs in tandem, then the use of boxes for oxidation, and soaping off after the jigging operation. The adoption of continuous dyeing principles used in indigo dyeing also supplied engineering ideas for evaluation of the first successful continuous vat dyeing which consisted chiefly of a padder, hot flue dryer or set of dry cans, "skying" unit, reduction box, booster box for adjustment of shade, cold wash, oxidation, and open width soaping-off unit. From the open width soaping box, the goods were batched or fed directly to a rope soaper for thorough soaping so that a fully developed shade was optained.

From this continuous vat range the present day Williams high-temperature and high-speed units were developed along with Du Pont's pad-steam unit.

Most of the present-day open width piece goods continuous ranges are combinations of different set-ups that may combine the Williams and pad-steam operation in the same range or use numerous units of the same process in a range so as to meet requirements for processing the different fabric constructions that a vat dyer must process now.

The troubles that a vat dyer must overcome are many and they can be grouped as a whole since they require correcting on every process that may be in use.

(1) Proper reduction of vat bath through correct amount of water used, entering into "spring bath," their maintenance of a satisfactory reduced bath so as to prevent shading caused by over-reduction or under-reduction of vat bath.

(2) On pigment dyeing, the vat pigment must be properly dispersed and kept from "aggregating" or falling out of dispersed condition. Careful drying of the pigment padded piece goods is essential as migration of the vat pigment during drying will cause shaded selvages and "tailing off" of shades during the reduction and finishing off operation.

(3) Careful selection of dyeing auxiliaries is necessary both on the dyeing by reduced or pigment method as well as the continuous operation. These dyeing agents must be free of effect on the vat pigment or reduced vat bath, possess low foaming action, and assist the vat color to level

and penetrate thoroughly whether it is yarn, staple or piece goods that is being processed.

Many of the auxiliaries that have found acceptance on vat dyeing of both in the pigment and reduced bath operation are the sufated oleyl and propyl esters, sulfonated alkyl aryl compounds, highly-sulfonated oleic—castor oils (brilliant oils), and sulfated cetyl and lauryl alcohols..

Agents possessing retarding action on vat dyeing operation without too much risk of breaking the reduced vat bath are the cellulose sulfite waste liquors and the highly-sulfonated brilliant oils such as Parapon and Prestolit oils.

There is a very useful range of retarding and leveling agents for vat dyeing but they must be used with care as many vat violets and blues are quite sensitive to their action and will "break" in a reduced bath. These leveling agents contain polyethylene oxide condensates such at Peregol O, Albatex P and Triton NE. These agents may be used as assistants in stripping vat dyed goods in an alkaline hydrosulfite bath so as to level up streaked or off-shade vat dyelots.

The use of defoaming agents has proven of high value to vat dyers. There are various types on the market such as the Dow-Corning silicone type, Diafoam and Depuma, which are different in nature and quite fool proof for all types of vat dyeing operations.

Proper control of chemical feeding in of the hydrosulfite and alkalies has greatly improved the levelness in vat dyeing on continuous ranges.

The use of electronic Redox apparatus helps control of the reduction bath and prevents over or under feeding of chemicals, this in turn helps to prevent re-reduction of vat baths and dyelots. The chemical control of vat dyes helps to prevent re-reduction of vat bath which will usually leave their mark of off-shading on selvages or "tailing" and this is one of the chief steps of improvement obtained on control of vat dye bath as well as reducing the amount of chemicals used and obtaining fuller color yield of vat colors.

Another useful byproduct of the improved chemical control of vat dyeing operations is that the chemicals used are held to a minimum for dyeing operations and no large excess goes into sewage systems and rivers as compared to the older "rule of thumb" methods used in the past.

Two Volumes Theme Organic Chemistry

Henry Gilman's *Organic Chemistry: An Advanced Treatise* was completed this month with the publication of Volumes III and IV by John Wiley & Sons. Representing the result of a world-wide survey to select important material not covered previously, these final volumes are again collaborative works with contributions from specialists in several branches of the science. The books have been edited by Dr. Gilman, professor of organic chemistry at Iowa State College, and an editorial board consisting of Roger Adams, Hans T. Clarke, Reuben G. Jones, Carl S. Marvel, Gordon J. O'Donnell, David A. Shirley and Harry L. Yale.

Volume III contains "The Study of Organic Reaction Mechanisms" by Paul D. Bartlett of Harvard University, "Applications of Infrared and Ultraviolet Spectra to Or-

ganic Chemistry" by Foil A. Miller of the Mellon Institute, "Lipids" by J. C. Cowan and H. E. Carter of the Northern Regional Research Laboratory and the University of Illinois, respectively, "Organic Dyes" by H. W. Grimmel of the Metro Dyestuff Corp, "Some Aspects of Chemotherapy" by H. R. Ing of the University of Oxford, and "Antibiotics" by Lee C. Cheney of Bristol Laboratories Inc.

The final volume includes the following selected discussions: "The Terpenes" by Richard H. Eastman and Carl R. Noller, both of Stanford University; "Heterocyclic Chemistry" by Richard H. Wiley of the University of Louisville; "Starch" by W. Z. Hassid, University of California; "Chemistry of Explosives" by George F. Wright, University of Toronto; "Reactions of Organic Gases Under Pressure" by W. E. Hanford, M. W. Kellogg Co., and D. E. Sargent, General Aniline and Film Corp.; and "Oxidation Processes" by William A. Waters of Balliol College in Oxford, England.

Improved Barotor Announced By Du Pont

Research progress leading to a simplified and improved experimental model of the Barotor, a pressurized fabric dyeing machine developed in the textile research laboratory of E. I. du Pont de Nemours & Co., was revealed recently by Dr. William L. Hyden, director of the textile research division. The new experimental model is the result of intensive development and full commercial scale dyeing trials since the original Barotor model was introduced in August.

In these dyeings, filament fabrics of Orlon acrylic fiber, Dacron polyester fiber, nylon and acetate, up to 65 inches wide, have been dyed in open width with good levelness. Batches up to 1,000 yards of a four-ounce taffeta of Dacron filament have been dyed successfully, Dr. Hyden said. Also staple fabrics of Orlon and Dacron have been dyed satisfactorily in the Barotor. Research is now in progress on determining the ultimate capacity of the machine.

Complete dyeing cycles of less than five hours, including time for loading and unloading, have been demonstrated with commercial size batches. Samples of the dyed fabric can be taken from the new model of the Barotor at any time during the dyeing cycle without interrupting operation.

The Barotor was developed to capitalize on the advantages of batch-dyeing fabrics above the boil (212° F.) and at pressures above atmospheric pressure. Since the original model was introduced eight months ago, extensive operating experience with large yardages has resulted in a simplification of the machine. The dropping bars of the original model have been replaced by fixed bars. In addition, the number of bars has been reduced to less than 20 per cent of the number needed to dye a 1,000-yard batch in the former model of the Barotor. The reduction has, in turn, eliminated the need for expensive automatic loading and unloading equipment that was formerly thought necessary. A simplified semi-automatic loading and unloading arrangement has been satisfactorily operated, Dr. Hyden said.

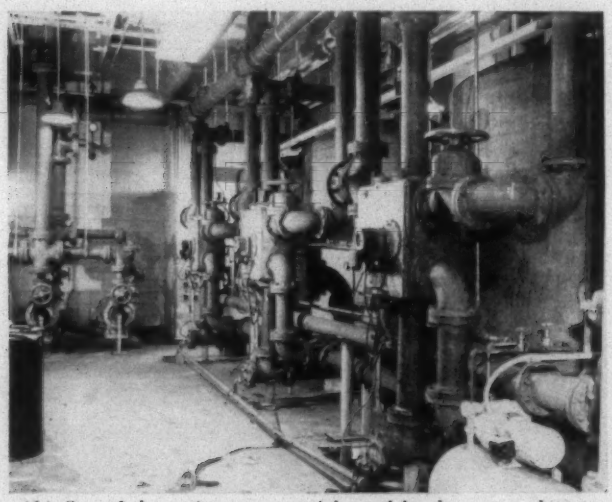
Dr. Hyden pointed out that inquiries on prices and orders are being accepted by the following manufacturers with whom licenses to make the Barotor are being negotiated under pending patents: James Hunter Machine Co., Weisner-Rapp Co. Inc., Rodney Hunt Machine Co., and Riggs & Lombard Inc. In due course, it is thought that similar licensing arrangements will be made with interested foreign machine manufacturers.

Dan River's New Power Plant

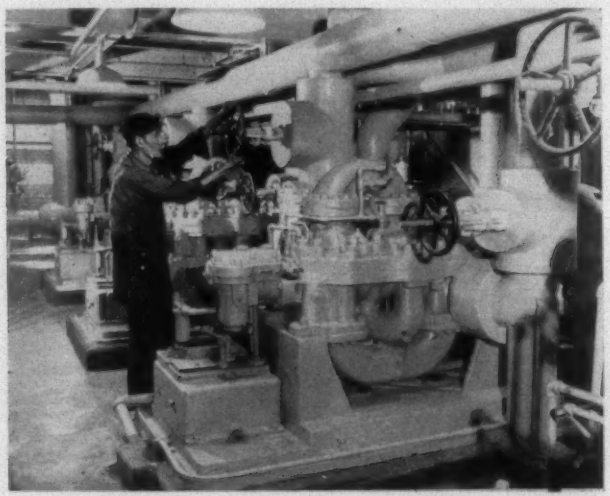
A NEW $3,000,000 addition to Dan River Mills' Schoolfield, Va., power plant was officially opened March 23 when the department held open house for all of Dan River's supervisors. The new addition, capable of producing enough electricity for all of Danville, exclusive of Dan River Mills, is one of the most modern of its type in the nation and is expected to save the company hundreds of thousands of dollars each year.

Most of the three million spent on the addition went for brand-new equipment, thus giving the plant its reputation as one of the most modern. It is designed to assure complete personnel safety, as well as to prevent damage to the equipment itself in case of any emergency. Likewise, features preventing stoppage of steam and power are included on the equipment. Naturally, a large amount of the new equipment is not scheduled for regular use, but is held in stand-by status.

The plant generates 10,000 kilowatt hours of 25-cycle current an hour for use in parts of the mill that have not been converted to the standard 60 cycles. In addition the

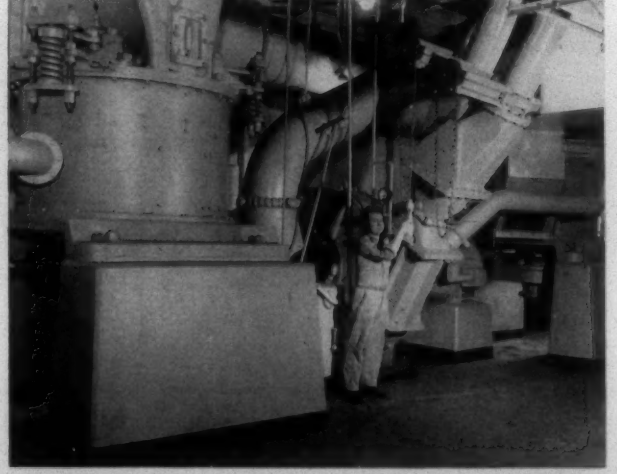


(1) One of the major raw materials used by the power plant at Schoolfield is water to be boiled into steam. Before the water can be put into the boiler it must be chemically treated to eliminate materials that might boil into solids and clog up the boiler. The water is treated in this room of the power plant.

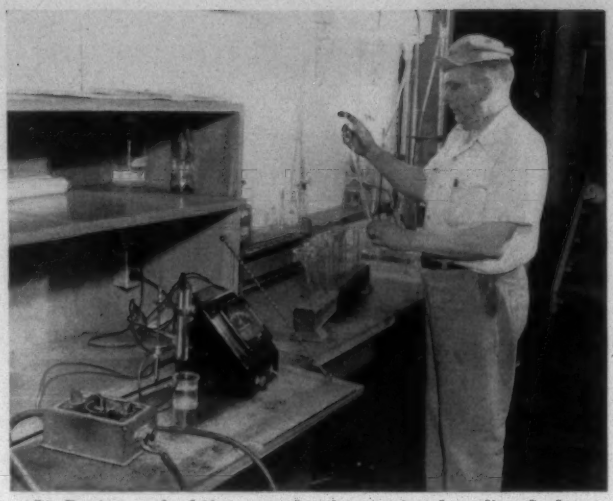


(2) The water after being treated is pumped at a rate of 400 gallons a minute into the boiler by this high-speed pump. Here an adjustment is made on a valve on the pump that controls the flow of the water. The water goes into the pipes that form the walls of a boiler eight floors high and several smaller boilers.

(3) In lighting the burners of the giant boiler a blazing torch is pushed into the boiler through a small hole. After the torch has been inserted into the boiler, oil is sprayed in and later, after the heat comes up, pulverized coal is sprayed in and burned in mid-air.

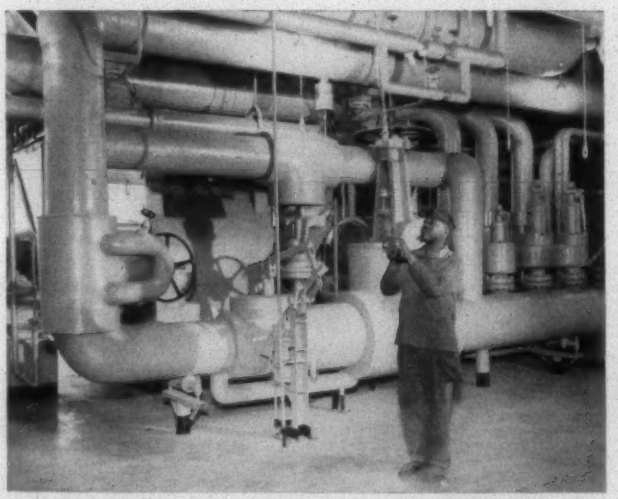


(4) Standing between two of the coal pulverizers, an attendant adjusts the gate through which the coal is fed into the pulverizers. In the pulverizers the coal is crushed until it is as fine as face powder so it will burn almost like gas when it is blown into the boiler mixed with air.

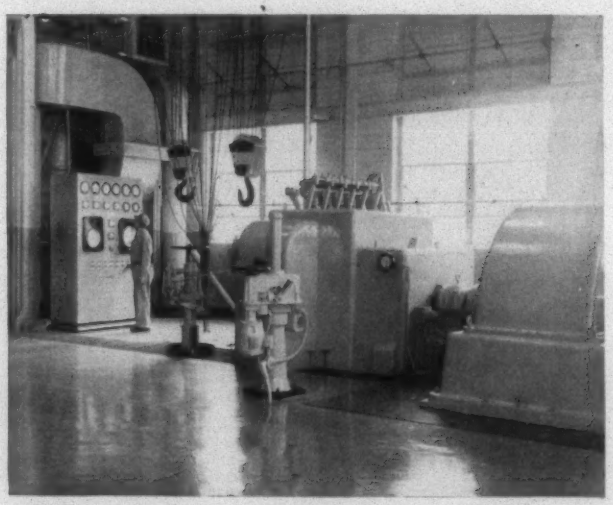


(5) During each shift a sample of water is taken directly from the boiler and tested to see that it has been sufficiently treated to prevent solid matter from forming. If the water was not treated it would clog the boiler and as a result cause it to eventually break open.

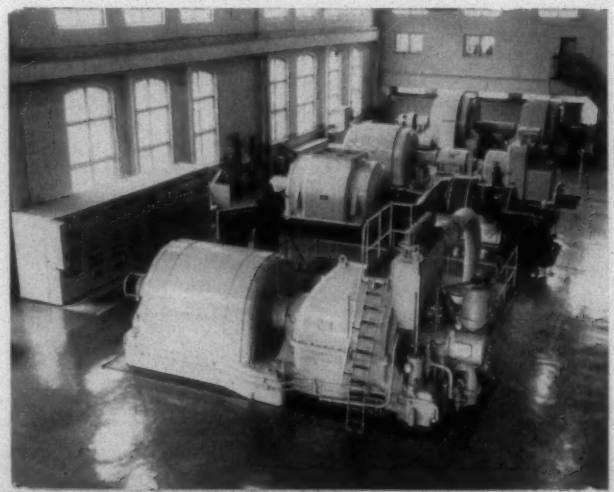
(6) Every phase of the operation of the boiler is constantly recorded on this boiler control board. An attendant is pictured making a record of the readings on more than 40 meters on the board. A record of the reading on each of the 40 meters is made every 24 hours a day.



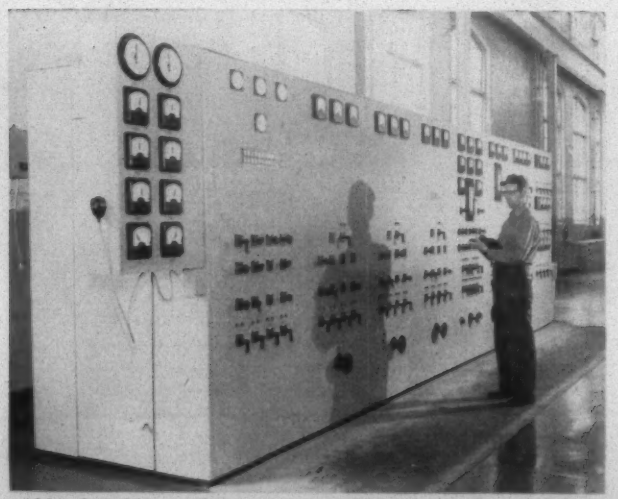
(7) Because the coal is powdered it leaves very little ash. The ashes it does leave are carried out of the boiler by pneumatic conveyor system to a hopper where they are cooled. An attendant is pictured opening the ash gate as he stands under the giant eight-story high boiler.



(8) Steam manufactured in the boilers is passed at high pressure through turbines that turn generators to make electricity. The attendant is dwarfed by the giant new turbine-generator as he adjusts controls for the unit. The unit, installed last year, produces enough electric power to supply almost half of Danville.



(9) Taken from atop the giant new turbo-generator set, this picture shows three other similar sets and a frequency converter. After steam passes through turbines it is piped to No. 5 Mill as well as to other parts of the mill for use in manufacturing processes and for heating.



(10) Switches on this control board can turn off the electric power of any part of the mill at any time. Distribution of all power generated by the company or purchased is controlled through this giant panel in the power plant Dan River at Schoolfield.

company buys approximately 100,000,000 kilowatt hours of 60-cycle current a year. Distribution of the 60-cycle current is controlled through the Schoolfield plant, too, and some of it is converted to 25-cycle current.

Electric power, however, is not the major product of the plant. The primary function is the production of steam for manufacturing operations as well as for heating. The bulk of the steam is used in No. 5 Mill.

The steam is made in a main boiler eight floors high which burns enough coal every hour to heat two small houses for a year. Although most of the smaller old boilers have been removed, several have been kept and are on a stand-by basis ready for use. It takes four men working 40 hours a week to unload the necessary coal for the boilers, even with the assistance of automatic conveyers which carry the coal from the unloading bin to bunkers where a three-day supply is always kept ready.

The coal is pulverized so that it is as fine as face powder and is blown into the furnace and burned in mid air, leaving a minimum of ash. Even the smoke is specially treated to draw the maximum of heat from it and to remove solid matters so that it will comply with city smoke regulations. The boilers are so constructed that they will also burn oil.

The steam made in the boiler is passed at high pressure through the turbines which turn the generators and is discharged at lower pressure ready for use in the mill. Distribution mains carry the steam at a rate of more than a mile a minute to No. 5 Mill.

Special equipment is used in conjuction with the power plant to chemically treat the water before it goes into the boiler so it will not boil out solid matter that would clog the boiler. The equipment, entirely automatic, cost approximately $350,000, and treats the water until it is even more pure than drinking water.

Operations in the plant are controlled and recorded electronically at all times. There are more than 68 different charts in electronic recorders that give daily records of every phase of the power plant's operations. *(Note:* Photographs and information courtesy of *Dan River News.)*

'We Don't Buy New . . . We Make-Do'

VARIOUS methods of making mill supplies last longer through repair and reuse were related by three mill supervisors who participated in a "make-do" forum during the Spring meeting of the South Carolina Division of the Southern Textile Association. The three participants were Edgar L. Cantrell, superintendent of Inman (S. C.) Mills; J. C. Godfrey, superintendent of Calhoun Mills at Calhoun Falls, S. C.; and Carl F. Franzen, master mechanic for Joanna (S. C.) Cotton Mills Co. The stenographic report of their discussion is presented herewith.

Mr. Cantrell: Prolonging the life of supplies is a very important factor in mill operations—making them last as long as possible, keeping them from wearing out. We are not entirely successful in that, of course, so what we do is to take these worn parts and reclaim them. I have found that we have been trying to salvage some parts that we should not, and we have probably been rejecting some parts that we should salvage. I will bring a few to your attention that I think are representative examples for our plant.

For instance, we have been salvaging treadles. That is a $1.29 item, and we can repair that to new condition for 45 cents. The repaired treadle is just as good as a brand-new one and gives the service of a new part.

We repair our crankshafts, too. That part, new, costs $7.50; and to make a worn one as good as new costs $3.25.

We have had about the same experience on the camshaft. A new one costs $5.82, and it costs about $1.50 to reclaim one.

On the other side of the picture we have such things as the bobbin disc stud, which costs 80 cents new and about $1 to repair. So it is not profitable to do that, and we have discarded that idea. The same thing is true of other studs.

There are some parts that we have been throwing away, and we find now that it is very profitable to reclaim them. Some of you use the double roll temple which carries the cast iron thread cutter in the temple top. It has been my experience that that cutter will wear itself forward in this temple part and go so far as to clip the filling and maybe touch the reed and cut the filling on the reed side. We have been discarding those parts. They cost 90 cents now, and we find that we can make a worn one perfectly good for 25 cents. We have thrown away barrels of them, I am sure, but we are not doing it any more.

We also tried salvaging the temple top, which carries the cast iron thread cutter. It wears in the bearing where the thread cutter cuts on the temple bar itself. We find that that part will wear until the cutter will hook over the lip of the temple and cannot make a full stroke. Therefore you have a part there that will not function as it should; it chews it off. We thought we would be smart and fix them, too. But that part costs 90 cents new and about 85 cents to repair, and it is not a good job then. So we have discarded salvaging that.

On the matter of loom beams, I think we all know that it is very profitable to repair those things. They cost, to the best of my knowledge, around $8 or $9. We find that we can make a repair for a single-beam 40 or 50-inch loom for around $2. It is a very good job. We do not decrease the diameter of the barrel. It may be rough, but we do not think it detracts from the quality of the barrel itself.

I think perhaps the psychology of the sales appeal of a repair part plays a big role in the success of a salvage program. The most important thing, of course, is that the job be a first-class repair. Without a first-class repair job it is impossible to sell the men who are going to take the repaired parts and use them and do a good job with them. If a man gets a part from the supply room and it has been fixed, if it is a rough-looking job he will not like the looks of it; and so he cannot do a good job of application with a part like that. So we try in our shop to give these salvaged parts a good appearance, a good sales appearance, because the men who are going to apply these parts are pretty expensive men and we feel that if they take a part that does not present a good appearance they are not going to do as good a job as they could, possibly, if that part had sales appeal. Usually, if a part has been painted originally, after repairing we paint it again.

We have one thing in our plant which perhaps many of you have. I hope this will be worthwhile to some of you who may not have it. When we do a lot of changing in our plant we have a tremendous mass of stuff—auxiliaries, cams, treadles, gears of all kinds—that we put back in our storeroom to be used again. To make this stuff more attractive we have arranged a vat which we fill with water and a pretty high solution of tri-sodium phosphate, and we give the parts a bath in that solution. When they are taken out they are perfectly clean. It not only gives the parts a better appearance, but it enables us to pick out the defective parts much more readily. Those parts are cleaned thoroughly before they are put back in our storeroom.

We have also recently found one part which we think is generally discarded and have only lately learned to salvage it. That is the carriage for the Abington stripper. When that becomes worn you are not able to set it close enough to do a good stripping job without danger of damaging the clothing on the doffer and on the cylinder;

there are six points or flanges on the inner side of this part; they are not too large, and they wear fairly readily. When they do you have lost motion and have the constant danger of tearing up a set of card clothing. We have recently learned that we can repair that by building up on these flanges, and with a special tool our mechanic developed we can cut that back to size and do a perfectly swell job. Not only is it dangerous to have a part like that running on your card but the dog, I presume you would call it, that carries the worm that carries the stripper part across the card wears out. This corrects that condition also.

Mr. Godfrey: We do practically the same thing that Mr. Cantrell does. But there is one thing we do have that he did not mention, which I think is pretty good. You know we have to control these things, and we have set up a good control in our stock room. We have bins for all the parts that come into our stock room, one for every second hand. Every time a second hand writes a requisition for a part in any room in the mill the worn part goes in his bin; and the overseers are supposed to check—my weaver is here, and I am saying "supposed" because I don't think he does it all the time—they are supposed to check those parts as they come in every day. All the parts that can be salvaged and rebuilt, as Mr. Cantrell has explained to you, go over into another bin with this same second hand's name on it. If a second hand writes a requisition for any part that the overseer thinks is not worn, the overseer of course calls his attention to it; and we try to save on parts in that way. The parts then go into another bin, after they are checked over, and then into the shop for repairs, as Mr. Cantrell has explained.

Mr. Franzen: We have a lot of trouble with the picker foot wearing out on the bottom and throwing the picker stick at an angle. So we built a part which holds the picker foot right in line with the shoe. It holds it right in line.

Then we had a lot of trouble with the cam gears getting loose on ordinary cold rolled steel. So we knurled the edge and press the gear on, and it holds it very firmly.

On shaft journals we bore a hole at one end and press the new shaft in.

As to scavenger weights, we have a pile of them by the welder, and whenever he gets a chance he works on them. We just build up that little pinhole where the scavenger roll works in.

Mr. A: How does Mr. Franzen repair his crankshaft?

Mr. Franzen: We cut off the worn part and weld a new end on it.

Mr. Godfrey: Calhoun Mills four or five years ago had at least four or five hundred crankshafts that they had laid aside. I have not bought a new crankshaft since I have been there. We cut off the worn end and weld another end on.

Mr. A: Do you metallize it?

Mr. Cantrell: My master mechanic told yesterday that he cannot get metallizing to stay on a crankshaft.

Mr. B: I should like to ask what type of repair is done on loom beams.

Mr. Cantrell: It is the same idea as Joanna has, except they reneck theirs, and we electro-weld the journals.

Mr. B: This repair work is all on the journals?

Mr. Cantrell: Yes.

Mr. Franzen: We also face off the ends of the wooden part, too. If the wooden part is bad in the middle we take off a thin piece and replace with metal. Then we cover that with filler.

Unique Fork Truck Driver Competition

Here are the details of a unique fork truck driver competition that has spelled increased safety for the truck operators at the American Finishing Co., Memphis, Tenn. It has also been responsible for decreased operating costs and equipment maintenance charges.

Each truck is assigned to a certain driver. If he is caught handling his equipment in a rough manner, or damaging material with his equipment, he is warned. The second offense means a one-day layoff. The third offense demands a one-week layoff. The fourth offense automatically calls for discharge. The second or third could conceivably call

for discharge, if the extent of the damage or the employee's attitude warranted it.

When the company receives a new truck, the selection of the driver is contingent upon his safety record and his cost record of truck operation. In assigning the new equipment to the driver, the company points out the reasons for his selection. Proof of the success of the operation: competition is so keen for a truck job, that it takes five years to become eligible.

The cost of operating fork trucks at American Finishing Co. has been reduced through the company's driver competition campaign.

Operators are enthusiastic about the competition, and the company find costs have tumbled. For example: the cost of operation of a single truck for an entire year, including amortized cost of the truck, is only $1,358.94. In addition, it must be realized that this equipment runs in some departments during three eight-hour shifts, bringing down the average cost to $452.98 for one year for one eight-hour shift per day.

At American Finishing, the trucks have compiled an amazing record for more efficient handling. For example, carloading time has been slashed from 28 to 1.3 man-hours; workers formerly used for this back-breaking task have been freed for more productive jobs within the company. The trucks have also increased the use of storage space 250 per cent; a truck stores 54 palletized rolls in space previously occupied by 15.

Unique Application Of Sprazon Reported

A Mid-West manufacturer has employed a safe, unique method for spraying overhead belts and others which were inaccessible. He is able to spray these belts while they are running—without danger to the operator. He used Graton & Knight Co.'s Grako Sprazon belt dressing, which sprays directly from its container. The can is attached to a pole with flat metal bands fastened by thumbscrews. A metal strap, pivoted at the top of the pole, rests on a rivet directly over the valve of the can. A string is attached to the end of the metal strap, and when pulled by the operator, releases the spray of belt dressing. This spray is easily directed onto belt and pulley surfaces. In addition to the important safety feature, the use of the pole eliminates ladders—saves time and tempers—and keeps the belts pulling at top efficiency.

American money always has talked, but never, we think, in so many languages before.—*Savannah* (Ga.) *Morning News.*

Promotions, Resignations, Honors, Transfers, Appointments, Elections, Civic and Associational Activities

PERSONAL NEWS

The following corporate changes recently were announced by Arnold, Hoffman & Co. Inc., Providence, R. I.: W. Chester Cobb has been promoted to commercial vice-president to direct the company's sales, purchasing and sales service laboratories. Thomas H. Roberts was elevated to the position of

L. to R.: Messrs. Tull, Roberts & Cobb

technical vice-president to head up the manufacturing, research and engineering activities of the firm. Reid Tull, former sales manager of Arnold, Hoffman's Teterboro, N. J., office, was appointed to the post of sales manager of the company, with headquarters in Providence. . . . Lowell Shive, formerly superintendent of Sellers Dyeing Co. Inc., is now a member of the sales staff of Arnold, Hoffman&Co. A graduate of North Carolina State College, Mr. Shive holds a B.S. degree in textile chemistry and dyeing and is a member of Phi Psi textile fraternity and Sigma Chi. Starting June 1 Mr. Shive will contact Arnold, Hoffman accounts in Tennessee.

Mr. Shive

The board of directors of Textron Inc. recently elected four vice-presidents, a controller and an assistant treasurer. The vice-presidents are: Robert M. Cushman, Frank Fiore, Frederick A. Jenckes and Edmon G. Luke, who will report directly to R. L. Huffines Jr., president. Douglas L. Grote was elected controller, replacing C. C. Hammer, resigned, and Arthur A. Erlandson was elected assistant treasurer, both reporting to W. D. Mewhort, treasurer. . . . Robert M. Cushman is in charge of manufacturing for the Southern Division, with headquarters at Anderson, S. C. He has been with the company since 1946, serving in various key manufacturing posts. Frank Fiore is responsible for sale of cotton and tricot products, plus commission dyeing and finishing. He has been with Textron since 1943, having been in charge of the export division and later of greige goods sales. Frederick A. Jenckes joined Textron on April 2, 1953. He was formerly vice-president of Burlington Mills Corp.; during World War II he was contracting officer for rayon and cotton fabrics for the Bureau of Supplies and Accounts, U. S. Navy; and previously was with Manville Jenckes Co., Manville, R. I. He is in charge of Textron's sales of spun and high-style filament fabrics. Edmon G. Luke supervises sales of staple filament fabrics. He recently joined Textron after resigning as president of Luke Division of Fox, Wells & Co. For nine years prior to that time, he was associated with Bates Fabrics. Mr. Fiore, Mr. Luke and Mr. Jenckes will make their headquarters at 1407 Broadway, New York City.

A. H. Hamilton has resigned as superintendent of the California Cotton Mills plants at Uniontown and Calcot, Ala., to join Mitcham & Co. of Gastonia, N. C., as its representative in South Carolina and western North Carolina. . . . W. H. Young, formerly manager and superintendent of Marilyn Mills at Anniston, Ala., has succeeded Mr. Hamilton at California Cotton Mills.

Prof. Henry A. Rutherford, head of the chemistry department at North Carolina State College, Raleigh, N. C., recently was re-elected pro consul of Delta Kappa Phi, national textile fraternity.

E. H. Bogardus, sales manager of rayon yarn for the textile division of Celanese Corp. of America, has retired. Mr. Bogardus had a combined service of 27 years with the company and Tubize Rayon Corp., which was absorbed by Celanese Corp. of America in 1946. Mr. Bogardus will make his home in Sharon, Conn.

Seven new members have been elected to the board of trustees of the Philadelphia Textile Institute. New members of the board are H. Howard Colehower Jr., president, C. Walker Jones Co., industrial textiles; Michael Daroff, president, H. Daroff & Sons Inc., clothing manufacturers; Edward L. Espen, vice-president, Moss Rose Mfg. Co., upholstery manufacturers; Edwin G. Michie, vice-president, Andrew Y. Michie & Sons, narrow fabric manufacturers; Philip J. Schlosser, president, Schlosser Mfg. Co., machinery manufacturers; Harry A. Sovel, treasurer, Quaker Pile Fabric Corp.; and William Zimmerman, president, John Zimmerman & Sons, pile fabric manufacturers. With the exception of Mr. Colehower and Mr. Daroff, all of the new members are graduates of the institute.

Mr. Switzer

Charles C. Switzer of Greenville, S. C., has been appointed vice-president in charge of the textile sales division of Keever Starch Co. Mr. Switzer has been manager of the Keever textile sales division for the past five years and associated with the company since 1941. The home office and plant of the company is located in Columbus, Ohio, with textile sales division offices maintained in the South Carolina National Bank Building, Greenville, S. C.

Risto P. Lappala of Bjorksten Research Laboratories Inc. at the Madison, Wis., laboratory, has been promoted from research chemist to group leader, in which capacity he will direct research on nonwoven and metallized fabrics. . . . Charles A. Barth Jr. has joined the Madison research laboratory of Bjorksten Research Laboratories where he will be developing methods of metallizing fabrics, with applications in the field of textiles. He was formerly project engineer at the Wright Air Development Center, Dayton, Ohio.

Franklin Farley has been appointed management consultant to the chemical divisions administrative staff of Food Machinery & Chemical Corp. in New York City. For the past 12 years Mr. Farley has been vice-president in charge of the phosphate division of International Minerals & Chemicals Corp., Chicago, Ill.

J. H. McGee has transferred from the household products division to the sales and service staff of the industrial division of Texize Chemicals Inc., Greenville, S. C. Texize manufactures sizing products for cotton and synthetic fibers.

Jesse H. Smithson has been named power superintendent and George O. Young has been named area maintenance superintendent of yarn at the new integrated nylon manufacturing center now under construction at Pensacola, Fla., for the Chemstrand Corp. . . . Six other Chemstrand appointees at Pensacola who will supervise activities in

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the yarn production are: James B. Cagle, named operations supervisor of inspection and shipping; Walter E. Cavell, named operations supervisor of drawtwisting; George T. Detwiler, named day supervisor of spinning; George A. Johnson, named area supervisor of inspection and shipping; George Malinoff, named operations supervisor of spinning; and George C. Tufts, named day supervisor of drawtwisting.

Leon Lowenstein, board chairman of M. Lowenstein & Sons Inc., will be honored at a testimonial dinner June 4 at the Hotel Astor in New York City on the occasion of his 70th birthday anniversary and 55 years in the textile industry. This testimonial dinner is also in recognition of Mr. Lowenstein's outstanding activities in many philanthropic endeavors.

Fred Nave has been appointed Southern representative for U. S. Textile Machine Co., Scranton, Pa., and will cover the Southern territory from headquarters in Elizabethton, Tenn. Mr. Nave's previous associations include Synthane Corp. and American Bemberg Corp.

G. G. Whiteside, formerly of Lincolnton, N. C., is now general superintendent of Carolina Mills Inc., Dillon, S. C. . . . A. C. Revels, formerly of Hamer, S. C., has been appointed superintendent of Plant No. 1 of Carolina Mills and Ezra Coats has been promoted from second hand to overseer of carding at Plant No. 2.


Mr. Pascal

Donald D. Pascal, vice-president in charge of sales for National Starch Products Inc., and Herbert C. Piel, vice-president in charge of National's Indianapolis, Ind., plant, have been elected to newly-created vacancies on the firm's board of directors. Mr. Pascal has been associated with National for 23 years and Mr. Piel 45 years. The company produces industrial adhesives, resins and specialty starches.

Dr. R. S. Dicks, formerly senior process engineer for the Shell Oil Co., has joined the textile division of Celanese Corp. of America. In collaboration with Kenneth D. Bowen, director of manufacturing co-ordination, he will direct the process engineering section in a study of the productivity of all chemical processing equipment in textile division plants.

Thomas D. Johnson, who has been associated with Reliance Electric & Engineering Co., Cleveland, Ohio, since October 1952, has been transferred to the company's Atlanta, Ga., sales application engineering staff. A native of Newberry, S. C., Mr. Johnson is a 1948 graduate of Clemson College with a B.S. degree in electrical engineering.

Frank P. Samford, president of the Liberty National Life Insurance Co. of Birmingham, Ala., has been elected to the boards of directors of six companies affiliated with West Point (Ga.) Mfg. Co. Already a member of the West Point board, he was named a director of Lanett (Ala.) Bleachery & Dye Works, Dixie Mill Inc. at LaGrange, Ga., Columbus (Ga.) Mfg. Co., Equinox Mill at Anderson, S. C., and Wellington Sears Co. of New York City.


Mr. Fitzgerald

L. K. Fitzgerald has been made general superintendent of Dan River Mills, Danville, Va. Mr. Fitzgerald, a native of Danville, was promoted only last October to the post of co-ordinator of merchandising and manufacturing from his previous position as director of research and development. In his new post as general superintendent he replaces Raymond Henderson, resigned, but under an executive realignment will have increased responsibilities. In addition to being responsible for all manufacturing and finishing operations, the new general superintendent will have reporting to him the heads of the engineering, personnel, research, production control and quality control departments. He will be one of five men reporting directly to the executive vice-president. Mr. Henderson resigned to become manager of the industrial fabrics division of Goodall-Sanford Inc., Sanford, Me.

Donald K. Evans of New York City, treasurer of Riegel Textile Corp., has been elected a director of U S Bobbin & Shuttle Co., Lawrence, Mass. Duncan B. Cox of New York, a manufacturer of electrical heating equipment, is another new U S Bobbin & Shuttle director.

Dr. Milton M. Platt, associate director of Fabric Research Laboratories, Boston, Mass., has been elected a vice-president. Dr. Platt joined Fabric Research Laboratories in 1946, shortly after completing his graduate studies at the Massachusetts Institute of Technology.

J. Harris Cannon has been elected a vice-president and director and Joe C. Ridenhour has been elected assistant secretary of Cannon Mills Co., Kannapolis, N. C. John S. Holt, a vice-president, also was named to the board of directors.

Richard V. McPhail of Watson & Desmond, Gastonia, N. C., has been elected president of the Gaston County Chapter of the North Carolina State College Alumni Association.

John Christian Boesch Jr. has joined Wica Chemicals Inc. as vice-president in charge of the dyestuff division. Mr. Boesch is the developer of liquid naphthol colors, adopted now as standard practice in the industry.

James M. Elliott has been elected president of Alexander Smith Inc., White Plains, N. Y., succeeding William F. C. Ewing, president and board chairman, who continues in the latter capacity. Mr. Elliott joined the company in April 1951 and prior to becoming president was administrative vice-president and treasurer. Mr.

Elliott also is president of Greenville (Miss.) Mills Inc., a wholly-owned subsidiary of Alexander Smith.

James J. Walker, senior purchasing agent for worsted items for the Armed Services Textile and Apparel Procurement Agency, New York, has retired from government service for reasons of health. A native of Philadelphia, Mr. Walker first entered government service in 1926, and joined the Philadelphia Quartermaster Depot in October 1941 as a purchasing agent for woolens and worsteds. Mr. Walker will make his home in Philadelphia at 6515 North Broad Street.

J. Harold Lineberger, well-known textile executive of Belmont, N. C., will be awarded the honorary degree of Doctor of Laws by Lenoir Rhyne College, Hickory, N. C., during the 62nd Spring commencement exercises June 1.

Mr. Spence

Gordon G. Spence has been elected treasurer of Whitin Machine Works, Whitinsville, Mass., succeeding the late Edward S. Alden, who died suddenly last January. Mr. Spence joined Whitin on March 1, 1953, having previously been associated with Ernst & Ernst of Boston. All other officers and directors were re-elected.

William R. Fox, a sales engineer for Hunt Machine Works in the South and in New England prior to becoming a manufacturer's agent on his own account in 1949, has been appointed a field representative in the New England territory for Dixon Saddle Co. He takes over duties previously performed by William R. Potter, Dixon's sales manager, who now will devote the bulk of his time to sales planning at the firm's Bristol, R. I., headquarters.

Samuel G. Crews, manufacturing superintendent at the May Plant of the Du Pont Co. at Camden, S. C., has been appointed to a five-member board to direct a multi-million-dollar program at the State Hospital for the Insane and the State Training School. The appointment was made by Gov. James F. Byrnes.

Henry R. Billings II, comptroller of the Draper Corp., Hopedale, Mass., has been made a director of the company.

William H. Grier, executive vice-president and manager of Rock Hill (S. C.) Printing & Finishing Co., has been made a trustee of Winthrop College at Rock Hill.

H. A. Gustafson has been elected secretary of Green River Mills, Tuxedo, N. C., succeeding the late Douglas Blois. Before becoming associated with Green River Mills about 18 months ago, Mr. Gustafson was vice-president and sales manager of Southern Venetian Blind Co. of Miami, Fla.

A. Keith Pooser has been placed in charge of engineering activities at the following plants of American Thread Co.: spinning plants at Troutman, N. C., Clover, S. C.,

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and Newnan, Tallapoosa and Dallas, Ga.; and finishing plants at Sevier, N. C., and Bristol, Tenn. For the past two years Mr. Pooser has been working on the company's new finishing plant at Sevier as resident engineer in charge of that project.

J. N. Summerell has ended his retirement from the textile industry by accepting a position with the LaFar group of mills, Gastonia, N. C., as vice-president and general manager. Mr. Summerell was for many years associated with Cramerton (N. C.) Mills, which in 1946 became the Cramerton Division of Burlington Mills Corp., and was general superintendent of the Cramerton Division upon his recent retirement.

James C. Self, president of Greenwood (S. C.) Mills, who recently was honored as the "Man of the South for 1952," will be additionally honored June 1 by Lander College, Greenwood, when he will be awarded the honorary degree of Doctor of Humanities.

William J. Rothemich, head of the textile colors division of Interchemical Corp., has been elected to the firm's board of directors. Mr. Rothemich has been associated with Interchemical since 1933.

Promotion of Walter H. Hammond as assistant supervisor in fiber production, and the new appointments of Lamar Beach and Philip D. Lawrence Jr. as process engineers, was announced recently by the Chemstrand Corp., Decatur, Ala. Mr. Hammond formerly was assigned to the research and development department. Mr. Beach, assigned to the spinning department, was a textile engineer with the Celanese Corp. of America at Rome, Ga. Mr. Lawrence, assigned to the polymer department, was a chemist with the Solvay Process Co., Hopewell, Va., and Merck & Co., Elkton, Va.

Harold Halvorsen has been appointed head of the mixed fiber department in the technical department of General Dyestuff Corp. Mr. Halvorsen, who has been with General Dyestuff 20 years, succeeds the late Ulrich Hutten. . . . Richard Hall has been named head of General Dyestuff's naphthol department. He has been with the company 16 years.

John Wardlaw has been named technical superintendent at Hatch Mill Corp., Columbus, N. C., Excelsior Mill, Rutherfordton, N. C., and Excelsior Mill, Union, S. C., all units of Deering, Milliken & Co. For the past three years Mr. Wardlaw has served as assistant superintendent of Hatch Mill and is being succeeded in that post by Bob Branner, formerly industrial engineer and supervisor at Excelsior Mill in Union.

W. B. Croxton has resigned as general superintendent of Sheraton Mills Corp., Cornelius, N. C., and has been succeeded in that post by R. P. Wilson, formerly production department manager. Sheraton is a subsidiary of Frank Ix & Sons Inc.

John P. Loud, superintendent of cellulose acetate manufacturing at the Celriver Plant of Celanese Corp. of America, Rock Hill, S. C., has been named special assistant to the manager of the company's plant at Cumberland, Md.

J. A. White, a vice-president of J. P. Stevens & Co. Inc., was honored recently by employees of Slater (S. C.) Mfg. Co., a Stevens unit, when Slater's modern baseball park was named White Field. Mr. White, formerly plant manager at Slater, is now assistant general manager of the Stevens firm's Carter Fabrics Division.

Walter E. Schacht Jr., a recent graduate of North Carolina State College with a B.S. degree in textiles, recently joined Fieldcrest Mill, Spray, N. C., as a quality control engineer.

H. D. Sears Jr. has been elected president of Pickett Cotton Mills, High Point, N. C., succeeding W. P. Hazelwood, who was made chairman of the board of directors. Other officers elected are: James H. Helichampe, elected secretary and treasurer (offices formerly held by Mr. Hazelwood); Robert Walker Jr., re-elected vice-president; and Fern Ferree, named assistant secretary-treasurer.

W. E. Lewis has been transferred from overseer of the finishing department to overseer of the packing department at the Calumet Plant of Callaway Mills Co., LaGrange, Ga. Mr. Lewis has worked at the Calumet Plant for 23 years, the past 14 as overseer of the finishing department. . . . Vance Sanders, formerly overseer of spooling and twisting at the Manchester, Ga., plant of Callaway, has been transferred to Calumet to succeed Mr. Lewis as overseer of the finishing department.

Paul M. Jones, for the past eight years sales promotion manager of the National Cotton Council, has been appointed president of the Carpet Institute Inc., succeeding Merrill A. Watson, resigned.

John Conway has been appointed an assistant sales manager for industrial chemicals of Carbide & Carbon Chemicals Co., a division of Union Carbide & Carbon Corp. Mr. Conway joined the company in 1935 and was assigned to Carbide's Fellowship at Mellon Institute in Pittsburgh. He later served as technical representative in the New York, Philadelphia and Boston offices. From 1942 through 1944 Mr. Conway served with the War Production Board in Washington, D. C.

OBITUARIES

M. O. Alexander, 82, who retired in 1947 after 59 years in the textile industry, 44 of them with Woodside Mills, Greenville, S. C., died May 4 at his home in Greenville. At the time of his retirement Mr. Alexander was general superintendent of the Woodside group of mills. Surviving are his wife, a son, two daughters and a brother.

Barney Bishop, 84, a pioneer in the Spartanburg County, S. C., textile industry, died May 3 in Fort Valley, Ga., after a long illness. Mr. Bishop was the second employee of Inman (S. C.) Mills, where he

began work in 1901, a year before the mill began operating. On his retirement in 1946 he was secretary and assistant treasurer.

E. S. Dunn, who until his retirement six years ago was vice-president and general superintendent of Avondale Mills, Sylacauga, Ala., died recently at a hospital in Memphis, Tenn., after a lengthy illness. Mr. Dunn was associated with Avondale Mills for 36 years. Interment was made in Sylacauga.

Mr. Fryer

Louis S. Fryer, 50, formerly vice-president of Industrial Rayon Corp., died May 2 of a heart attack suffered while playing golf. Mr. Fryer was associated with Industrial Rayon for 17 years, leaving that firm shortly after the end of the war to serve as an officer of Native Laces & Textiles. More recently he was in semi-retirement, acting as consultant for several rayon producing companies. He is survived by a sister.

Hargraves Gill, from 1929 until his retirement in 1951 president and manager of Westboro Weaving Co., Greenville, S. C., died recently. Surviving are his wife, three sons and four sisters.

W. J. Hunter, 59, a vice-president of Springs Mills Inc., collapsed and died while playing golf near his home in South Orange, N. J. Interment was made at Easley, S. C. Mr. Hunter had been associated with Springs for the past 21 years, having been made a vice-president in 1947. Prior to joining Springs he was with Easley & Woodside Cotton Mills, Easley, S. C., and Consolidated Textile Co. in Lynchburg, Va., and Henderson, Ky. Survivors include his wife, two daughters and a brother.

Alexander F. Ix, 58, president of Frank Ix & Sons Inc., manufacturer of man-made fiber fabrics and president of the National Federation of Textiles Inc., died suddenly April 29 at his home in Englewood, N. J. Mr. Ix spent his entire business career in his family firm. His four brothers shared with him the development of the enterprise started by his father, Frank Ix Sr., who survives him. The company is one of the most prominent synthetic fabric firms in the U. S. and is also active in the tricot knitting field, with plants in Cornelius, N. C., New Holland, Pa., and Charlottesville, Va. Mr. Ix is survived by his wife, two sons, two daughters, his father and four brothers.

Walston A. Lynn, 59, for 34 years associated with Springs Cotton Mills, Lancaster, S. C., died recently at his home in Lancaster. At the time of his retirement about a year ago Mr. Lynn was general purchasing agent of the Springs chain, having previously served as superintendent of Springs' Eureka Plant at Chester, S. C.

Walter B. Moore Jr., 67, retired textile executive, died April 27 at his home in Columbia, S. C. Mr. Moore was secretary and treasurer of Gastonia Cotton Yarn Co., Philadelphia, from 1912 to 1914, and then assistant to the president and acting president of Neely Mfg. Co., Travora Cotton Mills and Lockmore Cotton Mills of York, S. C., in 1917 and 1918. He was trustee, president and treasurer of Neely-Travora Mills Inc. from 1928 to 1940. Survivors include his widow, three daughters and a son.

Crawford H. Nanney, 57, who for a number of years was associated in a supervisory capacity with Threads Inc., Gastonia, N. C., died May 9 at a hospital in Rutherfordton, N. C. Interment was made in Spindale, N. C. Surviving are his wife, a daughter, two sons and three brothers.

Charles H. Robertson, 80, from 1907 to 1933 superintendent of Eno Cotton Mills (now a unit of Cone Mills Corp.) at Hillsboro, N. C., died April 23. Surviving are his wife, a son and a daughter.

Alfred C. Werner, 47, president of Chestertown (Md.) Mills, died April 26 of a heart attack at his home in Scarsdale, N. Y. Before organizing Chestertown Mills about a year ago, Mr. Werner was with American Viscose Corp. as assistant general sales manager, president of Fabritex Corp., head of Burlington Mills International Corp., and assistant to the president of Beaunit Mills Inc. His wife and two daughters survive.

MILL NEWS

CONSTRUCTION. NEW EQUIPMENT. FINANCIAL REPORTS. CHARTERS. AWARDS. VILLAGE ACTIVITY. SALES AND PURCHASES

GROVER, N. C.—A new brick building to house a finishing plant, 40 by 90 feet, is being added to Minette Mill. The addition is expected to be ready for occupancy by August and will be used for the production of rubberized cloth.

SPARTANBURG, S. C.—Officials of Mayfair Mills recently announced plans for an expansion and modernization program at the No. 2 Mill which is expected to nearly double production. The main portion of the program consists of excavating under the present mill structure and building a one-story addition to the plant. The weaving department will be located in the new addition. The new section will contain approximately 70,000 square feet and will be totally enclosed. Walls will be glazed tile with atmosphere to be automatically controlled the year round by central evaporative cooling system. The present weave room will be utilized for warp spinning equipment. The size of the plant will be increased by 19,968 spindles. The plant now contains 23,172 spindles.

CHESTER, S. C.—Plans have been announced for enlarging the Eureka Plant of Springs Cotton Mills here. Plans call for construction of a new two-story building, 110 by 80 feet, which will be air conditioned and will house 12,000 additional spindles. The new building is expected to be completed in six to eight months.

ATCO, GA.—Ground has been broken for an addition to Goodyear Clearwater Mills here to cost $1 million, with equipment, according to S. A. Steere, vice-president of the company's cotton mills. The building will be 260 x 75 feet and will be used to predip tire cord, Mr. Steere said. The construction schedule calls for completion of the building by early Fall. Batson & Cook, West Point, Ga., is general contractor. This marks the second expansion of Goodyear's mill here. A 324 x 80 one-story addition was completed in 1952, which is being used for preparing rayon yarn for twist into cord fabric. . . . Mr. Steere said an order had been placed for $50,000 worth of equipment to be placed in Goodyear's Cedartown, Ga., plant. This is in addition to $200,000 in equipment installed in the Cedartown plant during the past 18 months.

SALISBURY, N. C.—A gift of $85,000 from Cone Mills Corp., which operates a large spinning and weaving plant here, has enabled the City of Salisbury to go ahead with plans for a $242,158 sewage treatment program designed for ultimate elimination of stream pollution. The Cone gift was offered as recognition of the fact that the firm's local operations add substantially to stream pollution in Crane Creek and the Yadkin River. L. O. Chapman Co. of Charlotte, N. C., will be the contractor.

GREENVILLE, S. C. — Southern Worsted Mills Inc. is constructing an addition to its plant which is expected to increase capacity by about one-third and add an undisclosed number of employees. Daniel Construction Co. is contractor for the structure which will add about 23,000 square feet of floor space.

ANDERSON, S. C.—Ottaray Textiles Inc., a unit of Woodside Mills, has been purchased by LaFrance Automotive Fabrics Inc., a subsidiary of LaFrance Industries Inc. The purchase price was not announced. The Ottaray plant, a substantial part of which was built in 1948, contains 60,000 square feet of floor space. LaFrance has installed 250 looms and operation of the plant will consist of weaving and some yarn preparation.

GASTONIA, N. C. — Gastonia Novelty Yarn Co. Inc. recently received a state charter to prepare for market and distribute all forms of yarns, textiles, silks or fabrics. Authorized capital stock $100,000, subscribed stock $75 by J. Hinds, S. Funderburk and R. W. Baker, all of Gastonia.

SCOTTDALE, GA.—C. T. Houlton, contractor of Decatur, Ga., has been awarded the contract for an extension to the weave room of Georgia Duck & Cordage Co.

SCOTTDALE, GA. — The McPherson Co., engineers and architects of Greenville, S. C., announced the awarding of a contract to the A. K. Adams Construction Co., Atlanta, for an extension to the main mill operation of Scottdale Mills.

CLARKESVILLE, GA. — Expansion of the throwing department at Clarkesville Mills is nearing completion. Orders have been placed for 20 throwing frames and four winders, with delivery of this equipment expected soon.

FOREST CITY, N. C.—M. G. Allen Jr., superintendent of Alexander Mills, has donated the home he recently vacated to the community to be converted for use as a community house and recreation center. The house is located in the heart of the Alexander Mill village.

WILMINGTON, N. C.—The opening and cleaning department of Spofford Mills was severely damaged last month by a fire which firemen battled four hours before bringing under control. The flames spread to the ceiling and burned through to the second floor before being quelled. No estimate of damages was made available.

DANVILLE, VA. — Dan River Mills has an accident rate nearly three times lower than that of the average of other factories, according to a report by the United States Bureau of Statistics which compiles figures on lost-time accidents.

RICHMOND HILL, GA. — The Verney Corp. of Manchester, N. H., recently announced plans for construction of a rayon plant in Richmond Hill. Verney has acquired a 2,373-acre site, formerly the plantation of Henry Ford. The property, purchased from International Paper Co. for $700,000, includes Richmond Hill Village of 76 dwellings and 56 vacant lots, and Blueberry Village, with 38 dwellings and 11 home sites.

HOT SPRINGS, N. C. — Goodall-Sanford Inc., Sanford, Me., recently announced plans for establishment of its first Southern operation, to be located at Hot Springs, near Asheville. Elmer H. Ward, president, said his company will lease a plant that is to be erected on an 80-acre tract at Hot Springs by two recently-formed corporations: Spring Creek Industries Inc. and Madison County Enterprises Inc. Nearly $1,000,000 worth of equipment will be included in the original installation for yarn-making operations from picking through winding and twisting. About $800,000 will be spent in acquisition of property and construction of a modern, air conditioned one-story building with 60,000 square feet of floor space. Mr. Ward stated that the Southern unit would be erected with expansion in mind—so that weaving machinery could be brought in, if desired. The Southern Railroad's main line west from Asheville bounds the property. Provisions for a spur track to the plant have been arranged.

COOLEEMEE, N. C.—A new wide Sanforizer has been installed at the Cooleemee Plant of Erwin Mills Inc. The local plant also will Sanforize cloth for fitted sheets produced at Erwin's Durham, N. C., plant. . . . The sale of company-owned houses at Cooleemee began May 4. The Alester G. Furman Co. is conducting the sale; present occupants are being given first priority to purchase.

GREENVILLE, S. C.—On or about July 1, Stevens Mfg. Research will be moved from its present location and consolidated with other activities at Dunean Mills, a division of J. P. Stevens & Co. Inc. This merger of operations is made possible by styling changes already made at Dunean which permitted the removal of certain preparatory equipment, making floor space available for equipment from Stevens Mfg. Research.

ROXBORO, N. C.—Halifax Mills, a division of Pacific Mills, plans to open temporary quarters in the old Johnson Cotton Co. building here soon. Much of the plant's early operation is expected to consist of training workers. It is reported that the firm is locating in Roxboro only on a trial basis.

SILURIA, ALA.—Six months have been set as the goal for resumption of production at Buck Creek Cotton Mills here, which recently was practically demolished by a tornado. F. F. Phillips, president and treasurer of the company, made known that the mill would be rebuilt. The building and machinery were damaged beyond use in a violent windstorm. Mr. Phillips estimated the loss to Buck Creek Mills at $2,500,000. He said it was "pretty well covered" by insurance.

For the Textile Industry's Use

New Dodenhoff Frame

The W. D. Dodenhoff Co. Inc., has announced the completion of its entirely new ring spinning frame which is now being demonstrated at the company's plant. Plans for design and manufacture of the frame were announced several months ago. Company officials state that, while the frame is not a revolutionary departure from existing late model frames, it definitely possesses many new advantages long sought in the industry. It also incorporates features which permit more economical and efficient performance. An important singular advantage is pointed out in the fact that the machines will be completely engineered, manufactured and serviced in the South, and this new frame marks the first time that basic spinning machinery has been designed and built entirely in the heart of the industry.

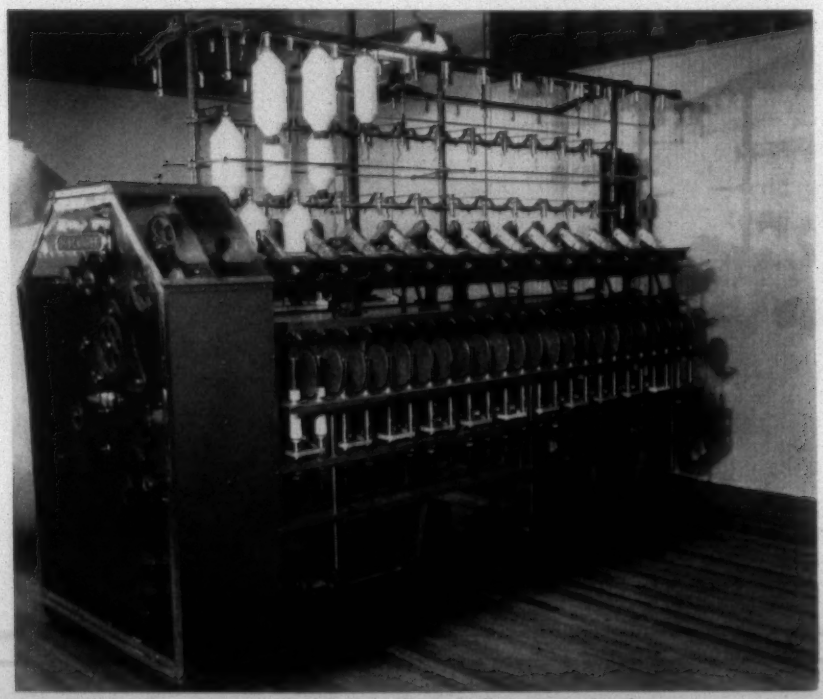
Main features of the Dodenhoff frame are the uniquely designed head end with its multiple inherent practical advantages, adjustable samson supports allowing a traverse range of eight to 11 inches, and top suspension arms adaptable to use of any single or double belted drafting system. Design of the top and bottom roll assemblies also provides for adjustment to run up to 2¾-inch staple with gauges of three, 3½, four and 4½ inches. This unprecedented flexibility is possible only with this design.

The anti-friction top rolls are individually spring weighted and suspended from the top arm. A snap action release allows each arm to raise independently for ease in cleaning, removing lap-ups without cutting, and easy removal of the rolls for recovering. No cap bars or nibs are used.

The head end is a completely enclosed unit housing the builder motion as well as all gearing, including the draft and twist change gears. The draft range is from ten to 60, and the twist range is from ten to 80. Silent chain and helical gears are used throughout the drive for smoothness and quietness of operation, and, more important, the elimination of backlash on the startup. The gearing mounted on sealed ball bearings is readily accessible and requires only one wrench to adjust any gear or bracket. A sump pump system of continuous lubrication is also incorporated in the head end housing. With the exception of the bottom fluted roll, lubrication will not be required more frequently than once a year.

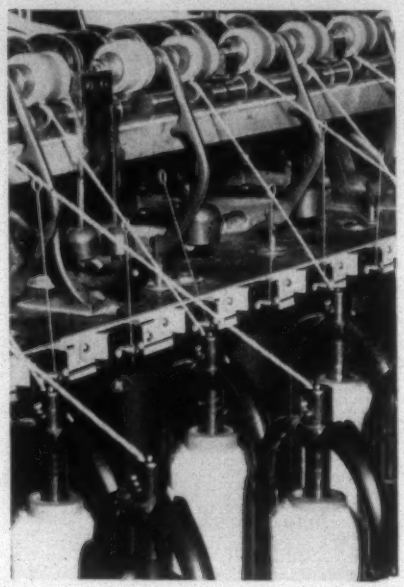
Instead of cast iron samson supports which are suject to breakage, newly designed 1½-inch diameter solid steel columns are used. These sturdy columns are adjustable and permit the roller beam to be raised or lowered to give the eight to 11-inch traverse range.

The Dodenhoff frame is also designed for adaptation of any air suction system in place of the scavenger rolls, as well as providing for installation of an underframe cleaner. An umbrella type creel is used with top suspension bobbin holders, and anti-friction spindles are included as standard equipment. (Request Item E-1).



Demonstration model of the Dodenhoff ring spinning frame.

Adams Roving Stop Motion

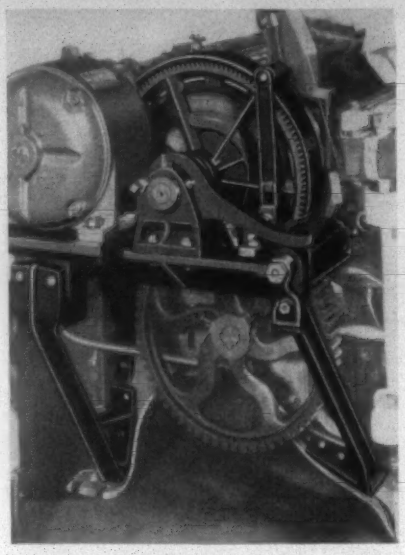


A new roving frame stop motion which is described as being the most effective cure for defective roving resulting from lapped rolls, plugged flyers, sliver runout, singling, doublings, etc., has been developed by S. J. Adams (Pat. No. 2,129,639) and is new being distributed by Adams Inc.

The Adams stop motion consists of a drop wire with an eyelet at one end through which the roving runs. The other end of the drop wire goes through a slot cut in the roll beam flange directly below each front roll. The drop wire is mounted on an insulated pivot just below its slit in the frame, and when no roving is passed through the eyelet, the wire is free to pivot until it rests against one side or other of the slit in the roll beam flange. While in this tilted position it closes an electric circuit which shuts off the frame. When, however, the tension of the roving holds the drop wires in an upright posistion, the electric circuit is open and in no way influences the normal operation of the machine.

A well-known manufacturer of rayon acetate yarn, in its instruction booklet on processing procedures, included this statement concerning the Adams stop motion: "There is a new stop motion on the market which is showing up in a very favorable light. This type stop motion will immediately stop the frame in case of a choke, low tension, or weak roving. The quality is improved, because when one end breaks down, it cannot whip around and make a doubling or break other ends down. This stop motion allows more spindles per operator with less work on his part. Spinning is improved also because the roving contains fewer piecings which results in better winding and higher grade yarn." (Request Item E-2).

Bahan Model D-1 Drive



Bahan Textile Machinery Co. recently made available to the industry an attractive new brochure describing its new Bahan Model D-1 motor drive. The brochure describes the Model D-1 as a motor drive that gives maximum pulling power with minimum tension—and positively keeps grease from the clutch—thus preventing slipping and loss of power efficiency.

Bahan states that the Model D-1 is practically trouble-free, adding that its construction reduces the amount of adjustment required by 80 per cent as compared with loom drives of the past. The Model D-1, because of its construction, reduces the required amount of tension for operation—this is reflected in uniform loom speeds and greatly increased life of all its parts.

The brochure adds that the new Bahan drive is so made that there will never be danger of grease failing to reach some working part; there is positive grease lubrication for every part which needs grease. Bahan Model D-1 drives are now available for Model E, Model K and modified Model D looms, the company states, and they can be adapted for various other models of looms. The company invites inquiries concerning its new drive. (Request Item E-3).

Dayco Cot

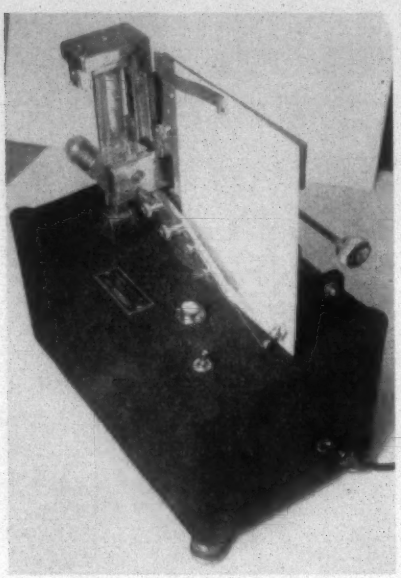
A new cot that cuts down eyebrowing has been developed for the textile industry by the Dayton Rubber Co. J. O. Cole, vice-president in charge of textile sales, said the Dayco cot, composed of a synthetic rubber blend containing Ibrocol, newly-discovered ingredient, also will draft better quality yarn, run longer between buffings and require fewer cleanings of the clearer boards.

"Superiority of this new cot is due to the chemical and mechanical action of Ibrocol," Mr. Cole explained, "which provides the cot surface with the exact coefficient of friction. As a result, short staples are removed and transferred under the clearer boards while the long staple fibers, that ordinarily build into eyebrows, are left in the yarn."

Mr. Cole said that laboratory and field tests of the cots containing Ibrocol also showed exceptional retardation of slicking and glazing, and were unaffected by mois-

ture or temperature changes and would not groove, pit or develop flat spots. "They gave fewer ends down, less lap ups, less eyebrowing and better drafting on all types of frames using both natural and synthetic fibers." (Request Item E-4).

Flat Bundle Fiber Tester



A new Scott tester for tensile testing of cotton fibers in flat bundles incorporates numerous innovations yielding results more comprehensive and significant than from previously available equipment. Known as the Clemson Flat Bundle Fiber Tester, this instrument is a development by Scott Testers Inc. of an instrument originally devised by Dean Hugh M. Brown of Clemson (S. C.) College. Dean Brown's studies in this subject were initially to improve upon existing fiber test methods in order to eliminate variations being experienced in currently available equipment. The resultant Clemson tester as finally developed and now made available accomplishes this objective and incorporates a number of other desirable advantages which may briefly be summarized as:

(1) Applies constant rate of load to sample. (2) Sample gauge length may be varied from 0 to ten mm. (3) Motor-driven, with control from either single tensile test or continuous hysteresis cycles. (4) Breaking load and elongation are recorded instantly without lag. (5) Produces a permanent record, reading directly in grams, useful for filing and reference.

The Clemson instrument makes use of the accustomed clamp equipment and sample techniques that are familiar to cotton mill technicians. On the Clemson instrument, the sample clamps are positioned in the *vertical* plane. The loading system is dead weight and at a constant rate of increase, actuated by a motor drive with simple operating controls, the load rate being 1,000 grams per second. The indication of the instantaneous load upon the sample is continuously drawn upon a form which is easily inserted in a suitable holder. Sample elongation and breaking load are also indicated by the graph, allowing the operator to determine the breaking load directly in grams. The test graph provides a permanent record convenient for filing and reference. Provision is made for sliding the form to five successive positions in the holder, for inscribing up to five tests in the single chart.

An important advantage which the new machine brings to this specific test is the ability to vary the gauge length. The sample clamps may be interted with the faces in conjuction for bundle tests at zero sample gauge length or they may be separated up to ten mm. apart for elongational testing upon that gauge length. A scale inscribed on the clamp holder indicates the amount of clamp separation and thereby shows the sample gauge length without computation.

An additional advantage is the ability to perform either single tensile tests, with mechanical stopping at the end or a single cycle, or hysteresis tests, the latter being accomplished by a simple twist of the control knob. Because the recording pen is mounted integrally with the moving clamp, the breaking load is recorded instantly without inaccuracy due to lag. Provision for reversal of the moving clamp at less than full load may be included.

The instrument is readily portable and requires only a single electrical connection to 110-120V lighting circuit and a table space of 15 by nine inches. The new versatility which this machine provides gives promise of interesting possibilities for the testing of fibers other than cotton. Further information may be obtained from this publication. (Request Item E-5).

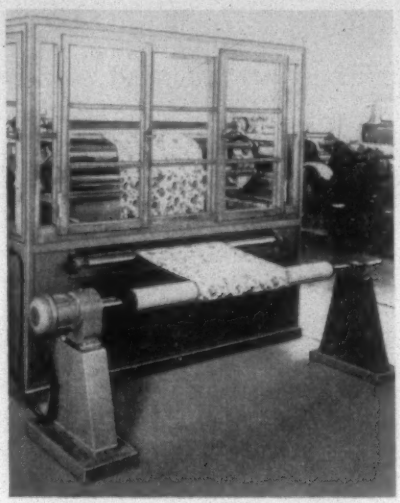
Powdered Sizing Compound

Easier handling and more accuracy in preparation are two of the many advantages of Houghton's dry, powdered Houghto-Size 475 sizing compound for cotton and synthetic warps. This modern, "one-piece" sizing agent is fully described in a new bulletin available from E. F. Houghton & Co. In granular form, Houghto-Size 475 contains no water or other unnecessary ingredients that do not help improve weavability. This feature assures high uniformity, economical slashing and lower transportation costs. In addition, Houghto-Size 475 provides good binding, reduces shedding and generally improves slashing and weaving efficiency. Its use has spread widely since its announcement. (Request Item E-6).

Servo-Fibrograph

Spinlab Special Instruments Laboratories has made available to the industry a new folder describing its new motor-driven Servo-Fibrograph. The folder describes the Servo-Fibrograph as "a precision optical photo-tube instrument that scans parallel cotton fibers to determine length and other factors that influence proper classification. This new Servo-Fibrograph," the folder continues, "is an improved model of the manual electronic Fibrograph 132. The Model 132, while a revolutionary step for the textile industry, depended largely on the skill of the operator who manipulated two wheels to trace the curve from which the data are taken. Now, the human element is removed from that phase of testing as smooth Servo motors automatically take over the job of tracing the curve more quickly and more accurately. Another great advantage of the Servo is that it frees the hands for preparation of new samples and interpreting the curve while the machine is operating. This, together with the increased speed of automatic curve tracing, actually speeds up testing approximately 400 per cent and in many operations one machine does the work of three old models." (Request Item E-7).

Hobbs Alquist Winder



Tension that is genuinely constant from start to finish of the winding operation is maintained by the newly-introduced Hobbs Alquist Winder, according to Willard H. Ware, president of Hobbs Mfg. Co. Control of the device is entirely electrical. It is said to permit users to get a quality of rewound material never before possible. In many cases, especially in handling very thin foils, small wires, and thin plastics (where minor variation in pull will damage or break the material) only the Hobbs Alquist type of equipment can successfully rewind such tender materials.

"As far as we know," Mr. Ware notes, "The Hobbs Alquist winder is the only unit of its kind having such a wide range of application. It is constantly and automatically sensitive to the material being wound, and accommodates itself to the speed of the machine without loss of pull or torque."

The Hobbs Alquist winder, according to Hobbs, is more efficient than any other type of winder. Neat and compact in design, it is easily installed, requiring only a hook-up to the present power outlet. Very little service or maintenance is required, but repairs can be made easily if needed. "Whereas the efficiency on other types of constant tension devices will run under average conditions at ten per cent to 15 per cent," Mr. Ware reports, "the actual power utilization on the Hobbs Alquist winder runs to as high as 80 per cent." This means that the new Hobbs unit can perform the same work with approximately one-fourth of the horsepower required for other types of winders.

The winder is small, and said to be by far the most compact of its kind. It is comprised of a specially designed electric motor and housing, with a control box or panel to be hung on the wall or at some other convenient place for remote control. Either right-hand or left-hand winding can be se-

cured. Since the unit is completely independent of all mechanical drive for the machine itself, being operated through its own electric circuit, its operation is not dependent on the operation of the machine. This factor is very important in many installations.

Comparison with performance of other winders in terms of "doing the same work" is inexact, Mr. Ware maintains, inasmuch as the Hobbs Alquist winder performs in a class by itself. Specifically, it winds up on a roll or a spool a wide variety of materials, maintaining uniformity of tension throughout the diameter of the roll, providing a positive and easy adjustment of any winding tension. The tension can be set at a certain number of pounds' pull at the start of a roll, and is maintained automatically at that tension from the core to the circumference of the roll. Thus the Alquist winder prevents the costly damage that often results when winding material that is prone to stretch under too much tension or to break if roughly handled.

Versatility of the Alquist winder is expressed by the maker in stating that it will handle the very lightest of materials, such as thin rubber and plastic, as well as the very heavy materials found in wire and cable plants. It will cover a very wide range of industry, and each unit can readily be adapted to the specific material to be wound. The machine can be designed to maintain whatever speed is required to handle the material as it comes from the preceding operation, such as rewinding cloth out of a printing machine.

"In many applications, winding must be done at constant tension and must be regulated according to the speed of the preceding operation," Mr. Ware notes. "The amount of pull or torque and the speed of the Hobbs Alquist unit are automatically controlled within very narrow limits. Therefore, any manufacturer or converter who has the job—especially a problem job—of winding or rewinding materials should be interested in this unit."

Manufactured in Europe since 1946, the Hobbs Alquist winder is now making its debut in the United States. Hundreds of the units have been installed in other countries, especially in England, Scandinavia, Switzerland, France and Germany. In view of its uniform success wherever installed abroad, and in view of the wide and growing need in this country for a winder superior to any presently in use, the Hobbs Mfg. Co. has undertaken to import and sell the new unit as sole representative for the United States and Canada. As soon as sufficient volume is developed, the machine will be manufactured in this country. Cost of this unit is fully competitive with any units now known to be in use.

Complete details on the Hobbs Alquist winder are available from Hobbs Mfg. Co. Inquiries about performance and price may be addressed direct to Frank J. Woodberry, assistant sales manager, machine division, care of this journal. (Request Item E-8).

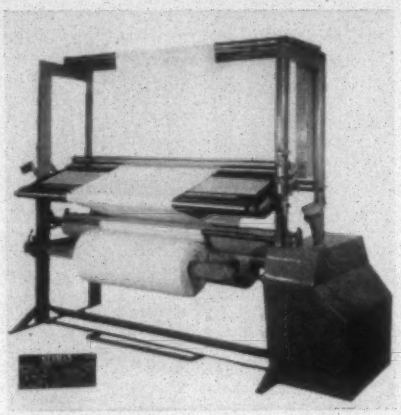
Floating Bottom Truck

Excel Textile Supply Co. announces that its new Excel truck with the new floating bottom is designed to eliminate backstreak-

ing, stooping, bending and straining. The floating bottom always keeps the load within easy reach of the operator, the company states.

The floating action is entirely automatic and adjusts itself according to the load. It requires no pumping, no cranking, absolutely no attention from the operator. Excel's engineered stabilizer assures positive free and level action of the bottom regardless of the position of the load in either end or in both ends. Rollers in edge of bottom eliminate bind, or drag, giving smooth, even action. (Request Item E-9).

Hermas Inspecting Machine



Especially designed to handle large rolls of cloth more efficiently, a new type of inspecting machine has been sturdily designed throughout. The frame is of five-inch channel steel, to take the weight of 36-inch rolls of cloth without vibration. All other structural parts are of equally husky construction.

For greater flexibility in operation, there is a variable speed drive with a nine to one ratio—a far greater range than is usually employed. For those who need them, a vertical light box or through-lighting in the inspecting table are available. A reverse wind and automatic over-run prevention brake on the let-off are standard equipment.

Further details concerning the machine may be obtained from the manufacturer, Hermas Machine Co., or on request to this publication. (Request Item E-10).

Eco Bronze-Impeller Pump

Following two years of field tests covering a wide temperature and viscosity range of clear lubricating fluids, during which hundreds of these pumps have been observed, Eco Engineering Co. has offered a bronze-impeller, positive-displacement pump for the handling of oils and greases. These lubricating fluids range from light-bodied fluids such as petroleum lubricating oil, cutting oil, the standard and new synthetic hydraulic fluids, castor oil, fish oil, glycerines, peanut and cotton seed oil, etc., to heavier diesel lubes, fuel oil, lard, oleos and rendered fats. Maximum capacity is ten g.p.m.

Several outstanding advantages of these Eco pumps are claimed. First, their positive displacement delivery, the result of two axially oscillating impellers which deliver continuous, non-surging flow without foaming or air entrainment. Next, their precision machined and sintered bronze powder-metal impellers, which act like oiless bearings operating in a lubricating medium in that they absorb oils like a sponge and retain them, greatly minimizing the dangers of heat seizures and scorched impellers.

These pumps are self-priming in low temperatures. Their operation, characteristic of their design, provides high efficiency with less horsepower and with smaller, lower cost motors. They are suitable for operating oil temperatures up to 500°F. Their suction lift compares favorably with the best obtainable with other types of positive-displacement pump. They may be operated submerged. They will pump in either direction and in any position.

Eco bronze-impeller pumps are offered to all quantity users of pumps as original equipment components for all types of machines, tools, equipment and devices requiring these reliable, low-cost units. (Request Item E-11).

Atolene NR

The development of a wetting agent, dye-leveller and dyebath lubricant without any rewetting powers is reported by Dexter Chemical Corp. The absence of rewetting action in such an agent is of extreme importance when the dyed goods are to be processed with water repellents. The new product, Atolene NR, is the result of several years of research by Dexter's laboratory. In the past, appliers of water repellents have been seriously handicapped by the rewetting powers of the average dye assistant, even when carried over in minute traces from the dyebath. However, with Atolene NR, Dexter claims, this danger has been removed.

Besides being an excellent wetting agent and dye-leveller, Atolene NR has the unusual effect of adhering to the surface of the fibers during dyeing, thus giving them a protective and lubricating film which acts to prevent formation of bruise marks on heavy rayon and acetate fabrics. When only wetting and dye-levelling is required, one to two per cent of Atolene NR on the weight of the goods is suggested. When lubrication to prevent bruise marks is required, two to three per cent on the weight of the goods should be used. This percentage may be increased slightly in the case of exceptionally heavy fabrics. (Request Item E-12).

Brochure For Shippers

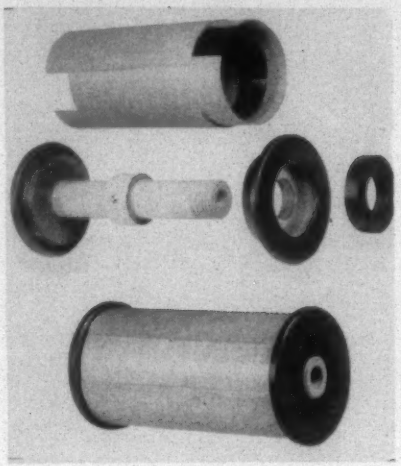
A new brochure describing an expedited service for shipping textiles and apparel cross-country is now available to shippers of soft goods, it was announced by T. R. Hudd, president of National Carloading Corp., one of the nation's largest freight forwarders.

The folder illustrates the scope of National's "Operation Textile," the freight operation designed to give West Coast manufacturers, sales agents and retailers a complete, expedited forwarding service to or from the East, and from the textile belt in the South to the Pacific Coast.

The seven special benefits "Operation Textile" provides shippers are also highlighted, including daily through cars to the West from all major Eastern textile centers, low published tariffs, and the services of specialists trained in soft good handling. In addition, the shipper also is served by daily forwarding reports, assumption of complete responsibility by the forwarder, greatly reduced paperwork, and the nationwide coverage provided by National's more than 150 stations throughout the country.

Copies of the "Operation Textile" pamphlet may be obtained from National Carloading Corp. or on request to this publication. (Request Item E-13).

Collapsible Bobbin



A new type laminated plastic bobbin which eliminates a number of costly production steps currently required to relax and preshrink nylon yarns has been perfected by the textile division of Synthane Corp.

A major problem in handling nylon yarn is created by the tendency of unprocessed yarn to shrink and relax to the extent of eight to 11 per cent as a result of subsequent heat-treatment. Using conventional shrinking methods, a substantial variation in residual shrinkage is usually encountered between yarn on the inside and yarn on the outside of the package.

The new collapsible bobbin not only holds residual shrinkage differentials constant within one-half of one per cent or less throughout the package, but has slashed processing costs by as much as two-thirds.

The new bobbin consists of a dual collapsible tube of paper-based laminated plastic. From each tube a segment is cut lengthwise and the inner tube is equipped with flat stainless steel springs to resist compression. The cuts in the outer tube are finished to a feathered edge to minimize barre' marks and the assembly collapses as the yarn demands. The barrel assembly is made of paper-based laminated plastic for extra smoothness, while the heads are machined from rugged cloth-base material to minimize breakage from rough handling. In effect the new bobbin is a headless tube which is filled with special chucks for universal service on redrawing, coning and sizing machines. The bobbin may be used on conventional equipment through the simple addition of an eccentric cam.

The new bobbin which can be used for all twisted yarns eliminates the 12-turn re-

strictions on nylon skeins and five-turn limitations on nylon filament yarns of 200-denier and over.

The elimination of several steps now required to pre-shrink yarn has resulted in processing cost savings up to 80 per cent, the company claims. The collapsible bobbin is also showing definite promise in the hosiery field where hose length differences are a major problem. Synthane Corp. reports that the bobbins are now in full production and may be obtained in one and two-pound sizes in diameters up to six inches. (Request Item E-14).

Penfield Demineralizer

Penfield Mfg. Co. announces availability of a new catalog sheet which describes Penfield's new M-100 mono-column demineralizer. Photographs and schematic diagram on the front of the sheet, combined with the detailed description of parts, sample specifications and performance data on the reverse side, provide a quick, concise and complete resume of all essential information. Penfield's new M-100 demineralizer operates on the extremely efficient and economical mono-column method: cation and exceptionally strong anion exchangers intimately mixed in a single unit tank through which the raw water is passed only once.

The unit is exceptionally compact, requiring for its installation only two feet by two feet by seven feet six inches of floor space, connection of influent to a plant's water system, and connection of effluent to those points where high purity water is required (process boiler feed, etc.).

Once a Penfield M-100 demineralizer is set in operation, up to 90 g.p.h. of super high purity water is produced completely automatically—without the use of heat or steam power. Regeneration of the resins is accomplished (as required) in a single operation consuming under an hour of time by means of a uniquely simple regeneration system that is an integral part of the unit.

Readers may secure copies of this new Penfield Model M-100 catalog sheet by writing Edward H. Clohessy, general manager, Penfield Mfg. Co. Inc., or on request to this journal. (Request Item E-15).

New Du Pont Dyes

Production of two new dyes, designated Leucosol Yellow LN Paste and Latyl Violet B, was announced recently by the Du Pont dyes and chemicals division.

Leucosol Yellow LN Paste produces bright greenish-yellow shades on cotton of superior light fastness than is obtainable with other vat yellows for printing. This new anthraquinone vat color is recommended for application in light to heavy shades and especially in formulating chartreuse, green and brown shades. Since its light fastness is maintained when the color is combined with other fast-to-light vat dyes, it should find extensive uses in printing drapery, upholstery and dress goods fabrics. It is also suitable for printing rayon as well as for the printing of fabrics that are to be resin treated. It is easily combined with gums and starches to form a printing paste of good viscosity that flows freely in the machine.

Latyl Violet B is a new dispersed type dye especially developed for use on Dacron polyester fiber. It has a bright blue-violet shade on both filament and spun Dacron and does not "tar" in the dyebath. It is an excellent base for brown, navy and black shades and is recommended for application to stock, top, tow, or fabric forms of Dacron. Latyl Violet B can be applied at normal dyeing temperatures with carriers, at elevated temperatures without carriers, and by the Thermosol process.

Two new Du Pont dyes, designated Latyl Orange R and Latyl Red B, developed specifically for the dyeing of Dacron polyester fiber, also were announced by the company's dyes and chemicals division.

Latyl Orange R is characterized by its bright, reddish-orange shade. This new dye for Dacron is applied from aqueous carrier baths, from aqueous pressure baths without a carrier, or by the Thermosol process. In pastel shades the color is extremely fast to light and shows very good resistance to wet processing treatments. Latyl Orange R is level dyeing and is recommended for use with Latyl Brilliant Blue 2G in the production of level-dyed, light-fast grays and tans.

On acetate, particularly in the pastel range, Latyl Orange R possesses good light, washing and gas-fume fastness. The color builds up well up to one per cent on acetate but at higher concentrations a redder shade with no increase in strength is obtained. Latyl Orange R has good light fastness on Orlon acrylic fiber, excellent light fastness on saran, and is poor in this respect on nylon. The color is suitable for printing acetate in the lighter shades. Union dyeing 50/50 mixtures of Dacron and wool shows wool to be considerably stained by Latyl Orange R, but not to an extent where wool fastness is impaired.

Latyl Red B has very good wet fastness properties. It can be used advantageously in light shades of gray and tan because of its outstanding light fastness. Under artificial light, Latyl Red B appears more yellow, which may counteract the redness of blues and violets used in the formulation of certain mixtures. The color builds up well in medium to full shades and dyes levelly when applied from either aqueous carrier baths or when pressure dyed without a carrier. When using benzoic acid or orthophenylphenol as dyeing assistants, it is suggested that they be removed from the material by scouring with an alkali and Duponol D paste fatty alcohol sulfate.

Latyl Red B is also of interest for use on acetate since it possesses very good light fastness in the lighter shades. Heavy shades are not recommended on this fiber because the color does not build up sufficiently. (Request Item E-16).

New Mothproofing Compound

Plans for immediate manufacture of the new mothproofing compound developed by the U. S. Department of Agriculture and known as EQ-53 recently were announced by Rohm & Haas Co. The new product will be of interest to woolen manufacturers who wish to protect fabrics or finished garments against moths during storage. It is expected also to prove highly effective for household mothproofing of woolens.

EQ-53 is an emulsion concentrate containing DDT, Triton X-100 (a Rohm & Haas emulsifier) and a hydrocarbon solvent. As a mothproofing treatment, it is said to provide exceptional protection to woolens and worsteds during storage, although the treatment is not claimed to be durable to washing and dry cleaning.

Sales to woolen mills and shrinking houses will be handled by the company's textile chemicals department; sales to distributors for household applications by the agricultural and sanitary chemicals department. (Request Item E-17).

Sealing Regulations Folder

Current shipping regulations on sealing and reinforcing packages with Scotch brand pressure-sensitive tapes are presented in a new six-page folder. The folder—describing the authorized applications for the use of tape on a variety of packages—is available on request from Minnesota Mining and Mfg. Co. It contains 13 illustrations showing typical sealing and reinforcing tasks as authorized by the Uniform Freight Classification, Railway Express Agency, U. S. Post Office Department, American Trucking Association, and Export Underwriters. (Request Item E-18).

Harwax-A

W. C. Hardesty Co. of Canada Ltd. recently announced a commercial grade of 12-hydroxy stearic acid, its Harwax-A. Harwax-A is a hard, amorphous solid with practically no taste or odor. Its melting point of 170° F. makes it the highest melting fatty acid which is commercially available. With a free hydroxyl group on the 12th carbon atom, Harwax-A exhibits many unusual chemical and physical properties, which have been found valuable in a variety of industrial applications. A few of the many uses of Harwax-A are in lubricating greases, textiles, and protective coatings. Technical bulletin is available. (Request Item E-19).

Thermoglare

Protection against the sun's heat, glare and ultra-violet rays in the form of a thermoplastic, which has been successfully field tested on textile mills in the South for more than three years, is now ready for national marketing in many industries as a result of increasing demand. The two anti-sun protective products are a spray-on plastic film and a sheet plastic, both produced by Eastern Industrial Service Inc. under the trade name Thermoglare.

Laboratory and factory tests reveal the products will filter out blinding ultraviolet rays up to 95 per cent, reduce transmission of hot infra-red rays up to 80 per cent and eliminate sun-glare problems. They are weather resistant.

Use of the film, which is sprayed on windows, has materially cut air conditioning, fuel and electricity costs in Southern mills, it has been shown. The sheet plastic, companion product, has the same characteristics.

Both are translucent, coming in two scientifically-balanced colors, blue-green and frost white. They provide highly desirable diffused working light. Further "shading" of factories is unnecessary when they are used. The sheet plastic is shatter-proof and

is designed to be used instead of glass window panes.

The Thermoglare products have definite applications to many industries, including textiles, where glare, solar heat and ultraviolet ray transference are problems. Because of their thermal insulating qualities, they can also be effectively used in cold climates, especially on military bases, the firm states.

A full-fledged promotional campaign is being launched by the corporation, which is headed by L. W. Broome, former color consultant to the government during World War II. (Request Item E-20).

Tramrail Cantilever Carrier

A new type overhead carrier with a cantilever arrangement that permits the unit to handle loads beyond the end of the crane on which the carrier operates has been developed by the Cleveland Tramrail Division of the Cleveland Crane & Engineering Co. The carrier was designed especially to take care of situations requiring the handling of materials in areas between roof-supporting pillars that cannot normally be covered by cranes, and, also, for reaching through doorways.

The extension feature of the carrier permits the hoist to reach out as much as two feet 1½ inches beyond the end of the crane. When it is necessary to travel the crane for some distance on its runway, the carrier is moved from the crane end to permit safe clearance of the columns.

This unit has a capacity of 1,500 pounds. Other cantilever carriers of different load capacities and reach can be made to suit conditions involved. (Request Item E-21).

Reeves Bulletin

Reeves Pulley Co. announces release of its new bulletin, V-532, describing the Reeves Flexi-Speed drive, the latest addition to the Reeves line of variable speed drives and controls. In addition to showing the flexibility in mounting by means of photographs, the bulletin describes the unit in detail, gives rating tables, shaft center distances, ordering instructions, and complete dimensions. Copies of the new Reeves bulletin may be obtained on request to this publication. (Request Item E-22).

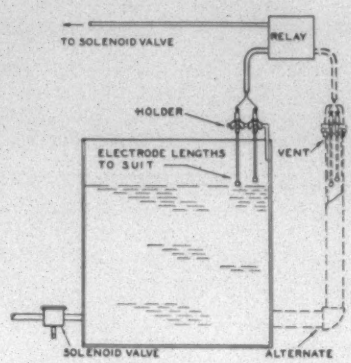
Rust Removal Booklet

A booklet on rust and tarnish removed by means of its six tailored types of Rustclean has just been published by Octagon Process Inc. It gives detailed instructions for the use of these new products by wipe-on, spray and hot and cold immersion methods. By following instructions it is possible to remove rust and tarnish, retard corrosion and promote paint adhesion in a single procedure. Heavy, immovable vertical and horizontal surfaces can be treated by use of a special tailored type of Rustclean.

All the Rustclean's are non-inflammable, non-toxic, non-corrosive and safe to handle. There are no obnoxious or corrosive fumes. Their action is very fast, varying from seconds to minutes depending on the heaviness of the deposits. They prevent the reformation of corrosive elements often accelerated by common pickling acids.

Copies of the new booklet are available on request from Octagon Process Inc. or to this journal. (Request Item E-23).

Simplied Tank Controls



A new attempt to simplify the problem of liquid level control has been announced by the Johnson Corp., manufacturer of steam specialties and boiler room equipment. Introduced as Johnson tank controls, the new approach is said to reduce the task of controlling levels in tanks, vats or other vessels to a matter of three time-tested, standardized components: (1) a Johnson electrode holder, (2) a relay and (3) a Johnson direct-operated solenoid valve.

In operation, two stationary electrodes are suspended in the tank where a circuit between them is established or broken by the rising or falling of the liquid level. This circuit actuates the relay which, in turn, operates the solenoid valve. This valve may be installed in either the tank supply or discharge line, whichever operating conditions require for proper level control.

Components are available in several sizes giving the Johnson tank controls flexibility to answer a wide range of requirements. They can be used with liquids of all types. For further information write to this journal. (Request Item E-24).

Nylon Whitening Agent

A new optical whitening agent designed for use with nylon, wool and other fine fabrics has been introduced by the Hilton-Davis Chemical Co. Division, Sterling Drug Inc., it was announced by Nelson S. Knaggs, vice-president in charge of sales.

Known as Hiltamine Arctic White NT for the textile industry, the optical bleach is the latest addition to the company's line of whitening agents for soaps, detergents and commercial laundering. When applied to the fabric, its chemical structure permits it to absorb invisible ultraviolet light, the "energy from which is converted to visible light in the blue range of the spectrum, thus adding new light to the total surface reflection," Hilton-Davis explains. Further, Hiltamine Arctic White NT has the ability to be retained on fabric in minute amounts. Being a direct-type dyestuff, it is pointed out, it readily exhausts from very dilute solutions. On application to white fabrics its fluorescent qualities cause a marked increase in the apparent whiteness of such fabrics. When used with colored materials, especially pastels, the brilliance of the shade is enhanced.

The new optical bleach, Hilton-Davis emphasizes, can be applied from an alkaline detergent or soap to the fabrics to be whitened, without causing yellowish discolorations. Previously, it is noted, optical bleach was employed from a neutral or acid bath. The whitener is available in standard packings of 100-pound fibre drums from Hilton-Davis or through the firm's sales distributors: Blackman-Uhler Co. Inc., or Hilton-Davis Sales Co. (Request Item E-25).

Sodium Epoxystearate

W. C. Hardesty Co. Inc. announces a new addition to its line of products, sodium epoxystearate. Sodium epoxystearate is an off-white powdered material containing a minimum of 90 per cent of the sodium salt of nine, ten-epoxystearic acid. More stable than the acid, the sodium salt is therefore more suitable for the preparation of derivatives.

The chief uses of sodium epoxystearic are as a source of epoxystearic acid in making metal salts, esters, amides and other derivatives of nine, 10-dihydroxy stearic acid. Suggested applications for the metal salts are as oil and grease additives, stabilizing agents for polyvinyl chloride and other halogenated products, drying catalysts for paints and inks, and other applications where the reactive properties of the epoxy group are of interest. Epoxystearic acid is also of interest in modifying alkyd resins and in the synthesis of products for the textile industry such as finishing aids, water repellents, softeners and the like.

Sodium epoxystearic is available in experimental quantities. Literature sent on request. (Request Item E-26).

Pressurized Aerosol Can

A yarn dressing, dispensed easily and quickly from a pressurized aerosol can, helps textile mills salvage sections of warp damaged in weaving, according to the Du Pont Co. Sprayed lightly on broken filaments of the warp threads, the compound acts as a lubricant, "plastering down" the broken fibers and permitting them to continue through the weaving operation without interruption. Because it is a water-soluble wax, the dressing is removed easily in scouring. Tests conducted to date by the Du Pont Co.'s textile fibers laboratory indicate it does not discolor the yarn. Best results are obtained when the compound is sprayed in a light mist from a distance of 18 to 24 inches to avoid heavy deposits which might gum up the shuttle. The convenient-size dispenser cans, which use Du Pont Freon fluorinated hydrocarbon as a propellent, operate uniformly at light finger pressure on the can valve. The product is effective on all filament yarns but is not recommended for spun yarns, the company states. (Request Item E-27).

New G-E Program

A visual program which outlines the latest electric power distribution practices for industrial plants has been announced by the General Electric Co. The new program

presents 12 ideas to help industrial plants maintain power continuity, reduce installation and operating costs, safeguard personnel and equipment and plan modern, efficient, flexible power systems.

The latest in the G-E More Power to America series of presentations, it consists of a 35-mm. sound-color slidefilm, a 28-page power distribution manual and allied literature with additional product information.

The 20-minute film, called "The Vital Link," offers information on how to select economical unit substation sizes, what circuit arrangements fit specific needs, how to select and maintain proper voltages, and what protective devices should be built into a power system.

Advantages of neutral grounding and radial and secondary-selective circuit arrangements are pointed out in the 106-frame slide film. Tables and cost-comparison charts aid in the discussion. The benefits of high-voltage lighting, rectifiers, capacitors, interlocked armor cable, and plug-in busway are illustrated.

Explaining the modern practices of electric power distribution in greater detail and in more technical manner than the slidefilm is the two-color, illustrated manual entitled "Industrial Power Distribution Idea Book." This publication, designated GEA-5900, stresses the same 12 points as the slidefilm, but goes into a deeper analysis of each idea.

Another bulletin included in the program package is GEA-5896, a 12-page booklet of case histories which show power distribution systems installed in industrial plants of various types throughout the nation. A check-off card to obtain additional descriptive publication on specific electric power equipment such as transformers, rectifiers, and motor-control centers, round out the material offered in the new program.

The new M.P.A. program is designated primarily for management and engineering personnel of industry. Individual showings of "The Vital Link" can be arranged through electric utility companies or any General Electric apparatus office. The entire package, including slidefilm, sound recording, idea book, and allied publications, can be purchased outright from G.E. for $25. (Request Item E-28).

Electric Heater Bulletin

A new Wing electric heater bulletin describes the Wing line of electric unit heaters and heater sections for general, industrial and commercial heating as well as for specialized use in heating corners of factories, warehouses, etc., as manufactured by L. J. Wing Mfg. Co.

The bulletin illustrates the three types of Wing electric heaters: the overhead, downward discharge unit heater with revolving discharge outlets; the overhead, downward discharge unit heater with stationary discharge outlets; and the utility unit heater, with horizontal discharge, with adjustable vanes. In addition, the Wing electric duct heater section is described for oven work, drying operations, and similar process heating.

Explained are the special features such as the dependable Hynes electric heating element—an integral component of Wing electric unit heaters and duct heater sections. Engineering data includes capacity tables as well as dimensional data with mounting heights and coverage. The bulletin is identified as No. E-29. (Request Item E-29).

Rubber-Fabric Application

Perfection of a method of applying foam rubber directly to cloth, including stretchable types, is announced by the Fremont Rubber Co. The company hails the process as revolutionary, as no adhesives are used to bond the rubber to the cloth. Foam rubber is literally fused to fabrics in the manufacturing process. On stretchable materials worn next to the skin, this is of vital importance in that an adhesive layer would prevent or minimize "breathing"—the passage of perspiration or air currents. Cushioned upholstering and similar materials which must be shaped around curved surfaces can be applied without danger of separation of rubber from fabric when this new type foam-on-cloth is used. There is no adhesive layer to become loosened under stresses and strains. Rubber in gauges, ranging from 1/16 to three-eighths of an inch, may be appled to various types of fabrics, including most of those used in the upholstering trade. (Request Item E-30).

New G-E Bulletin

A new eight-page, two-color bulletin on speed variator auxiliary drives for calendering coated fabrics has been announced as available from the General Electric Co. Designated GEA-5788, the publication shows how the G-E speed variator co-ordinates auxiliary sections and the main calender drive without lineshafts, chains, or mechanical speed changers. It points out outstanding design features and explains how wider speed range, maximum flexibility, and controlled tension and speed can be obtained with a G-E engineered calender system.

Specific auxiliary drives for fabric tension and fabric windup are given special emphasis in the well-illustrated bulletin. Installation photographs and one-time diagrams supplement a combined discussion of the problems of each operation and the advantages offered with the installation of G-E drive equipment. (Request Item E-31).

Fire Retardancy Bulletin

American Cyanamid Co.'s textile resin department announces the publication of a revised bulletin, "Pyroset DO Fire Retardant," which describes methods of applying the firm's line of Pyroset to impart fire retardancy to cotton, rayon, wool, mohair or combinations of these fibers. The booklet is available to mills and finishers on request. (Request Item E-32).

Power Reference Booklet

A motor and generator reference booklet to assist in the selection of motive power to handle most industrial applications is being made available by Allis-Chalmers Mfg. Co. The 50-page pamphlet is reprinted from the 1952 edition of *Lincoln's Industrial-Commercial Electrical Reference* published by the Electrical Modernization Bureau Inc. Text and illustrations on integral horsepower motors and generators for the book were furnished by Allis-Chalmers in co-operation with the Electrical Modernization Bureau.

Copies of "Allis-Chalmers Motor and Generator Reference Book," 51R7933, are available on request. The complete 1,768-page *Lincoln's Industrial-Commercial Reference* can be obtained for $18.75 delivered from the Electrical Modernization Bureau Inc. (Request Item E-33).

Trumbull Developments

A completely new type of wireway has been developed by the Trumbull electric department of the General Electric Co. According to a recent announcement, the new wireway introduces features which are designed to speed and simplify installation. On the cover, for instance, only two screws are required to fasten the cover to any one section. All other cover fasteners are of the lock type.

Sections are joined by connectors, tees and elbows, all of which require only one screw, which lock a hook and slot arrangement. The connectors and other fittings have a removable face plate which permits wires to be laid in after completion of the wireway installation. Straight sections are available in lengths of one, two, three, four, five and eight feet, all in four cross-sectional sizes—4x4, 4x6, 6x6 and 8x8 inches. These new wireways, which will be manufactured by Trumbull's Seattle Plant, are approved as auxiliary gutter and wireway by Underwriters Laboratories Inc.

A new line of standard duty safety switches also has been announced by Trumbull. The Plainville, Conn., plant, according to a recent announcement, is now producing a new line of standard duty safety switches which is available in ratings of 30, 60, 100 and 200 amperes, 240 and 600 volts, two, three and four poles. Known as the Standard Duty HCI, this safety switch line is designed to meet all but the most severe operating demands. (Request Item E-34).

Moreland Data Sheets

The manufacturing division of Moreland Chemical Co. Inc., producer of textile chemicals and specialties, recently issued two technical service data sheets describing two of its new developments, Morofin R and Morolube BA.

Morofin R is discribed as a new completely saturated fatty polyester supplied in the form of an easily dispersable white paste. Morofin R, which can be used in combination with other sizing and finishing materials, is said to add softness, fullness of hand and improved appearance to all textile fibers, yarns and fabrics.

Morolube BA is a new non-ionic polyester combined with a specially developed, completely saturate non-saponifiable lubricant supplied as an easily dispersable, almost liquid, opalescent cream. Morolube BA is said to impart a high degree of lubricity and improved sewability to fabrics treated with it without imparting any marked increased softness.

Copies of the Moreland data sheets may by obtained on request to the company or to this publication. (Request Item E-35).

Serving The Textile Industry

Open Charlotte Branch

Electric Furnace Corp. of Chattanooga, Tenn., has recently opened a branch plant for the Teflon coating of textile equipment in Charlotte, N. C. According to Stanley Livingstone, president of the company and manager of the Chattanooga plant, Electric Furnace Corp. is the oldest custom coating establishment in the South specializing in the application of Du Pont's Teflon (polytetrafluoroethylene).

While Mr. Livingstone continues direction of the Chattanooga plant, J. S. Livingstone, will manage the new branch. The Charlotte facilities have been designed to accommodate steam cans and rolls for slashing and finishing with facings up to 12 feet and any diameter not greater than five feet. Due to these expanded conditions it is now possible for Electric Furnace Corp. to give one to two-day service for reasonable quantities of textile equipment.

According to Mr. Livingstone, the field of Teflon coating for the textile trade has barely been touched, as witnessed by the tremendous amount of research work being done by Du Pont in its laboratories and the continuing experimentation Electric Furnace Corp. is carrying on in both plants.

Reliance Baltimore Office

Establishment of a new branch office in Baltimore, Md., by Reliance Electric & Engineering Co., Cleveland, Ohio, manufacturer of motors and motor-drives, is announced by K. S. Lord, Philadelphia district manager of the company. Mr. Lord said that this new Baltimore branch office, located at 13 West 25th Street, enables the company to broaden the availability of Reliance sales application and technical engineering service to users of a-c and d-c motors, adjustable-speed drives, gearmotors and related electrical equipment in the area embracing Maryland and Virginia. The office is staffed by A. C. Schettler and W. C. Mitchell, sales engineers.

Werner Southern Branch

Werner Textile Consultants have opened new Southern headquarters at 306 Ponce de Leon Avenue, N.E., Atlanta, Ga. The new branch office has been set up to better coordinate assignments for Southern mills this consulting firm is engaged in and to correlate the work of its staff members in the Southern region.

J. Paul Mills, a member of Werner's executive committee, is in charge of all Southern operations. Mr. Mills, an Atlantan, and Georgia Tech alumnus, has been with the firm for many years. Jack C. Werner, formerly head of Werner's planning and research department in Larchmont, N. Y., is in charge of the Atlanta office, and will concentrate on technical servicing, over-all supervision and clients' relations. Both Mr. Mills and Mr. Werner are making their headquarters in the company's Atlanta office.

Collins Expands Service

Collins Bros. Machine Co. of Pawtucket, R. I., announces that it has taken over all the new and replacement parts for the banding machines, reels, skein winders and spindles (both plain and roller bearing), of the Easton & Burnham Machine Co. of Central Falls, R. I. Collins Bros. states that it will fill outstanding orders and be pleased to continue the pleasant relations which existed between the trade and Easton & Burnham.

Loom Service Co. Organized

Loom Service Co. has been organized and is in business with headquarters at Taylors, S. C., for the purpose of furnishing on a per loom contractural basis skilled labor to overhaul, widen, motorize, etc., Draper looms. The new firm is now in a position to send supervised crews to Southern mills for this type of work.

Partners in the new concern are Wilburn Asbury, B. M. Cooper and E. H. McCurry. Mr. Asbury served in the Air Force during the past two years, and prior to that was a service engineer in the loom service field. Messrs. Cooper and McCurry spent ten years in this field prior to the organization of Loom Service Co. They may be contacted at P. O. Box 544, Taylors, or Tel. 5-8443, Greenville, S. C.

Glover Southern Inc.

Glover Southern Inc. recently began operations in a new plant at Greensboro, N. C., producing high quality automatic loom filling and warp spinning bobbins. The new Glover plant is staffed by experienced personnel and the latest type automatic machinery is utilized. Also, in addition to new bobbins, machinery has been installed to do all types of bobbin re-working. The company expects to specialize in dogwood, which is native to North Carolina, and which is a superior wood due to its toughness and extra density. Glover's selling agent is R. E. L. Holt Jr. & Associates Inc. of Greensboro.

I P A Southern Inc.

Formation of I P A Southern Inc., textile machinery dealer, with headquarters in the South Carolina National Bank Building, Greenville, S. C., was announced recently. I P A Southern Inc. is chartered in South Carolina and will be affiliated with Industrial Products of America, Paterson, N. J. The new corporation will engage in the purchase and sale of used textile machinery, specializing in dyeing, printing and finishing equipment and will serve the Southern textile finishing mills. Other services offered will include appraisals and liquidations of mill properties and machinery. I P A Southern Inc. will also act as Southern representative for a number of leading dyeing, printing and finishing equipment manufacturers with whom negotiations are being conducted. G. H. Hansen, vice-president of Industrial Products of America, will be president of I P A Southern. The offices will open on or about April 20 in Greenville.

Barnes Agent Appointed

Textile Specialty Co. of Greensboro, N. C., announces that it has completed arrangements to represent Henry K. Barnes Co. of Salem, Mass., 77-year-old tanners and fabricators of fine leathers for the textile industry. The Barnes company is noted in the trade as specialists in all types of aprons for the woolen and worsted systems.

Largest Attendance In Recent Years Expected At Annual S.T.A. Convention June 18-19-20

THE largest attendance of both mill supervisors and suppliers in recent years is expected at the annual convention of the Southern Textile Association June 18-19-20 at Blowing Rock, N. C. This 44th meeting of textile mill managers, superintendents and overseers and their suppliers in the Carolinas and Virginia will begin Thursday evening, June 18, and conclude at noon Saturday, June 20.

Business Program

Speakers whose names are well known in the textile industry will be on the business agendas Friday and Saturday mornings. At the Friday session addresses will be made by James I. Teat of Southeastern Engineering Co., Charlotte, N. C., whose subject will be waste control in textile mills; Frank H. Leslie, general partner in the New York City textile selling agency of Leslie & Co. as well as president and treasurer of Clinchfield Mfg. Co. at Marion, N. C.; and a third speaker whose name will be announced shortly.

On the formal program Saturday morning will be remarks of Retiring S.T.A. President D. A. Purcell (superintendent of the Fieldcrest Mills' blanket plant at Draper, N. C.); an address on the national situation by Hon. Charles Raper Jonas, who last Fall was elected on the Republican Party ticket as a member of the United States House of Representatives from the Tenth North Carolina Congressional District; and a talk embracing practical employee relations by Hugh Forster of Lancaster, Pa., assistant to the president of Armstrong Cork Co. Attendance prizes will be given at both business sessions.

President Purcell is scheduled to announce appointment of nominating and resolutions committees Friday morning, and these groups will report at the Saturday session. With customary procedure being followed, the S.T.A. members are expected to advance Mr. Purcell to chairmanship of the board of governors (succeeding J. L. Delany, general superintendent of Jonna Cotton Mills at Joanna, S. C., and president of the S.T.A. in 1951-52); advance to the presidency the current vice-president, T. I. Stafford (production manager of Clifton Mfg. Co. at Clifton, S. C.); and advance from the second to the first vice-presidency J. L. James (manager of Erwin Mills Inc. at Cooleemee, N. C.) The mill man who is nominated and elected second vice-president this year is expected, if usual routine is followed, to advance to the S.T.A. presidency in 1955-56.

Terms of four members of the board of governors will expire at the Blowing Rock meeting, and new directors will be chosen for three-year terms ending in 1956. Those whose terms expire this year are James A. Chapman Jr., manager of Riverdale Mills at Enoree, S. C.; E. C. Horner, superintendent of Enterprise Mfg. Co. at Coleridge, N. C.; A. M. Moore, superintendent of Erwin Mills' Plant No. 6 at Durham, N. C.; and Walter Vincent, who is with the production management of Dan River Mills Inc., Danville, Va.

A breakfast meeting of the current S.T.A. board of governors (which includes division chairmen and past presidents as ex-officio members) is scheduled for 8 o'clock Friday in the Hunt Room of Mayview Manor, headquarters hotel, and a short reorganizational meeting of the board will be held after the Saturday business session is concluded.

Recreation Features

A variety of recreational and entertainment features, sponsored to a large degree by the S.T.A. Associate Members Division, will take up a considerable portion of the three-day meeting. Thursday evening prior to the buffet supper at Mayview Manor, the Associate Members Division will entertain at a social hour in the Mayview ballroom. After supper the Associate Members Division (of which J. Alden Simpson of Corn Products Sales Co. is chairman and Junius Smith of TEXTILE BULLETIN is secretary) will sponsor a floor show in the ballroom, this to be followed by dancing. The associate members again Friday night before dinner will be hosts at a social hour, with entertainment and dancing following dinner.

Friday afternoon will feature the annual golf tournament, to be played under the Calloway handicap system at Blowing Rock Country Club; W. S. Terrell of Terrell Machine Co., Charlotte, will be tournament chairman. Also programmed Friday afternoon, in the headquarters hotel, will be setback and bingo contests run, respectively, by George Snow of Atlanta Brush Co. and S.T.A. Vice-President Stafford.

Hotel Accommodations

Due to the large number of mill men who some months ago made room reservations at Mayview Manor, only a limited number of accommodations for associate members was available in the headquarters hotel. Milton Chapman, managing director of Mayview, has leased Green Park Hotel for operation under his management, and the Mayview overflow is being assigned to Green Park. The latter hotel as of May 18 was also booked to capacity, and additional accommodations were secured at motels in and on the outskirts of the village of Blowing Rock. There are a number of very modern motels—among them Mountainaire Motor Court, Appalachian Motel, the Ranch Motel & Restaurant, Hart's Motor Court and Pine Court—which offer excellent and reasonably-priced accommodations. Those who have just recently made plans to attend the S.T.A. convention

should contact the managements of one of these direct for reservations. Meals will be available at Mayview Manor and Green Park Hotel for all persons attending the convention.

For trip enjoyment it is suggested that those traveling to Blowing Rock from South Carolina, Virginia and north-central North Carolina pick up the Blue Ridge Parkway, 300 miles of which is now paved and open for use between Asheville, N. C., and Roanoke, Va.

Mill Men Who Will Attend

Following is a fairly complete list of mill officials who are planning to attend the Southern Textile Association convention next month:

J. L. Adams, Beaumont Division, Spartan Mills, Spartanburg, S. C.; W. M. Aiken, Seminole Mills, Statesville, N. C.; M. G. Allen, Alexander Mills, Forest City, N. C.; W. M. Allison, Spartan Mills, Startex, S. C.; John Auerhammer, Clinchfield Mfg. Co., Marion, N. C.

L. E. Bagwell Jr., Beaumont Division, Spartan Mills, Spartanburg, S. C.; Harold J. Ball, Pequot Mills, Whitney, S. C.; C. A. Barrett, Orr Mills, Anderson, S. C.; S. R. Basinger, Cone Mills Corp., Greensboro, N. C.; S. A. Black, Aleo Mfg. Co., Rockingham, N. C.; J. A. Blackwelder, Carlton Yarn Mills, Cherryville, N. C.; Hubert R. Blume, Columbia Mills, Columbia, S. C.; C. A. Boggs, Elberton Mills, Division of United Merchants & Manufacturers Inc., Elberton, Ga.; Thomas Borland, Howell Mfg. Co., Cherryville, N. C.; M. L. Brackett, Highland Park Mfg. Co., Charlotte, N. C.; L. R. Briggs, Highland Park Mfg. Co., Charlotte, N. C.; Hilliard Brigman, Safie Mfg. Co., Rockingham, N. C.; J. K. Bruton, Erwin Mills, Erwin, N. C.; H. L. Buchanan, Orr Mills, Anderson, S. C.; H. W. Buchanan, Erlanger Mills, Lexington, N. C.

Marcus W. Carter, Hart Cotton Mills Inc., Tarboro, N. C.; J. M. Caughman, Spartan Mills, Spartanburg, S. C.; J. T. Chalmers, Orr Mills, Anderson, S. C.; J. A. Chapman Jr., Riverdale Mills, Enoree, S. C.; Perry Clanton, Reeves Bros. Inc., Spartanburg, S. C.; Jesse F. Cleveland, Clifton Mfg. Co., Clifton, S. C.; H. C. Cobb Jr., Mooresville Mills, Mooresville, N. C.; Roy Coffee, Orr Mills, Anderson, S. C.; Herman Cone Jr., Cone Mills Corp., Greensboro, N. C.; M. C. Cottingham, Erwin Mills, Durham, N. C.; Alex Crawford, Joanna Cotton Mills, Joanna, S. C.; Smith Crow, Erlanger Mills, Lexington, N. C.

T. I. Dashiell, Spartan Mills, Spartanburg, S. C.; J. L. Delany, Joanna Cotton Mills; W. H. Esslinger, Orr Mills; H. Cleon Estes, Pacific Mills, Rhodhiss, N. C.; Winder Gary, Aleo Mfg. Co., Rockingham, N. C.; Glenn D. Gaskins, Union-Buffalo Mills, Union, S. C.; C. A. Gibson, F. W. Poe Mfg. Co., Greenville, S. C.; J. R. Gilbert, Rocky Mount Mills, Rocky Mount, N. C.; J. C. Godfrey, Calhoun Mills, Calhoun Falls, S. C.; Jack Guyer, Robbins Mills Inc., Raeford, N. C.; W. H. Hardeman, Consolidated Textile Co. Inc., Shelby, N. C.; R. S. Harrison, Glendale Mills, Glendale, S. C.; W. C. Hayes, U. S. Rubber Co., Winnsboro Mills, Winnsboro, S. C.; Carl R. Hicks, Howell Mfg. Co., Cherryville, N. C.; R. E. Hilton, Winnsboro Mills, Winnsboro, S. C.; C. T. Holland, Pacolet Mfg. Co., Pacolet, S. C.; T. D. Hollingsworth, Consolidated Textile Co. Inc., Lynchburg, Va.; Edwin M. Holt, Cone Mills, Greensboro, N. C.; E. C. Horner, Enterprise Mfg. Co., Coleridge, N. C.; W. F. Howard, Pacific Mills, Lyman, S. C.; Palmer A. Hudson, Consolidated Textile Co. Inc., Kings Mountain, N. C.; Joe P. Hughes, Cone Mills Corp., Hillsboro, N. C.; Rodger Hughes, Reeves Bros., Spartanburg, S. C.; George M. Huguley, Clinton Cotton Mills, Clinton, S. C.

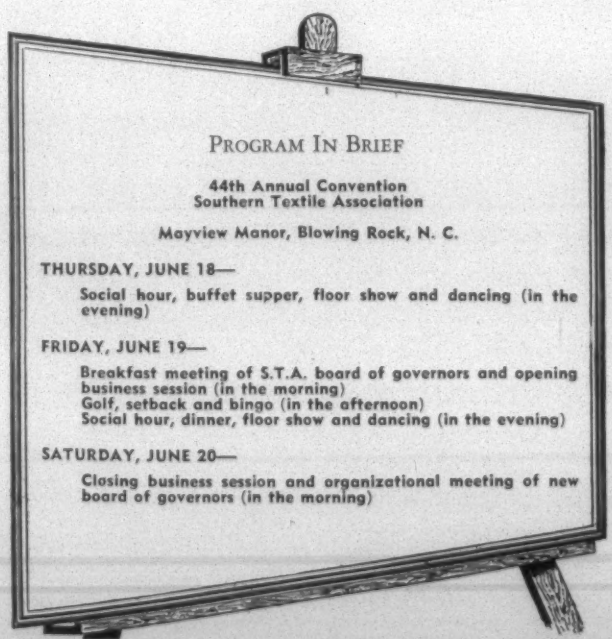
J. M. Jackson, Gaffney Mfg. Co., Gaffney, S. C.; J. L. James, Erwin Mills, Cooleemee, N. C.; Arthur S. Jarrett, Highland Park Mfg. Co., Charlotte, N. C.; W. P. Johnson, Riegel Textile Corp., Ware Shoals, S. C.; F. W. Keasler, Inman Mills, Inman, S. C.; Bomar Keller, Aragon-Baldwin Mills, Rock Hill, S. C.; W. D. Knox, Glendale Mills, Glendale, S. C.; J. B. Lanford, Glendale Mills, Glendale, S. C.; I. L. Langley, Consolidated Textile Co. Inc., Lynchburg, Va.; P. S. Leach, Consolidated Textile Co. Inc., Lynchburg, Va.; E. G. Leonard, Carlton Yarn Mills Inc., Cherryville, N. C.; E. W. Lollis, Limestone Mfg. Co., Gaffney, S. C.; J. B. Lybrand, Union-Buffalo Mills, Buffalo, S. C.

A. R. Marley, Erwin Mills, Erwin, N. C.; D. A. McCanless, Elberton Mills, Elberton, Ga.; J. McCutchen, Leward Cotton Mills Worthville, N. C.; E. G. McIver Jr., Erwin Mills, Durham, N. C.; W. H. McKeown, Highland Park Mfg. Co., Charlotte, N. C.; J. R. Meikle, Rosemary Mfg. Co., Roanoke Rapids, N. C.; W. H. Miley Jr., Erwin Mills, Erwin, N. C.; A. M. Moore Jr., Erwin Mills, Durham, N. C.; John McD. Moore Jr., Dacotah Cotton Mills, Lexington, N. C.; T. C. Pegram, Erwin Mills, Durham, N. C.; Horace Pennington, Cone Mills Corp., Greensboro, N. C.; T. B. Phillips, Chatham Mfg. Co., Elkin, N. C.; W. M. Pittendreigh, Riegel Textile Corp., Ware Shoals, S. C.; I. B. Pitts, Hermitage Cotton Mills, Camden, S. C.; W. B. Pitts, Hermitage Cotton Mills, Camden; J. B. Powell, formerly of Monarch Mills, Lockhart, S. C.; D. A. Purcell, Fieldcrest Mills, Draper, N. C.

E. L. Ramey, Inman Mills, Inman, S. C.; J. V. Randall, Cartex Mills Division, Carlton Yarn Mills, Salisbury, N. C.; Monroe Randall, Howell Mfg. Co., Cherryville, N. C.; G. W. Ray Jr., Aragon-Baldwin Mills, Rock Hill, S. C.; W. A. Rhinehardt, Golden Belt Mfg. Co., Durham, N. C.; M. A. Rhyne, Travora Textiles, Graham, N. C.; T. L. Ritchie, Marion Mfg. Co., Marion, N. C.; V. O. Roberson Jr., United Merchants & Manufacturers Inc., Greenville, S. C.; D. H. Roberts, Lydia Cotton Mills, Clinton, S. C.; T. G. Roche, Limestone Mfg. Co., Gaffney, S. C.; M. Weldon Rogers, Ely & Walker Dry Goods Co., St. Louis, Mo.

John D. Scott, Cone Mills Corp., Greensboro, N. C.; M. E. Seals, Cartex Division, Carlton Yarn Mills Inc., Salisbury, N. C.; E. W. Seigler, Jr., Abney Mills, Greenwood, S. C.; D. E. Sherrill, Reeves Bros., Spartanburg, S. C.; T. I. Stafford, Clifton Mfg. Co., Clifton, S. C.; Robert T. Stutts, Carolinian Mills Inc., High Shoals, N. C.; Dee Trammell, Carlton Yarn Mills, Cherryville, N. C.; Herman Vinson, Robbins Mills, Raeford, N. C.; Paul Walker, Cone Mills Corp., Greensboro, N. C.; Harold W. Whitcomb, Fieldcrest Mills, Spray, N. C.; W. H. White, Cone Mills Corp., Greensboro, N. C.; T. J. Willis, Greenwood Mills Inc., Mathews Plant, Greenwood, S. C.

Reservations were made recently in the names of Robert T. Dixon, Barber Mfg. Co., Charlotte, N. C.; H. L. West and J. G. McGraw of Drayton Mills, Spartanburg, S. C.; Smith Crow Jr., Erlanger Mills Inc., Lexington, N. C.; Julian Bolick, Gordon Boyce, Elwin Abrams, C. N. Franks, Walter Byars and Carl Franks of Joanna Cotton Mills, Joanna, S. C.; J. B. Baker of Pelzer Mills, Pelzer, S. C.; A. E. Tousignant of Spofford Mills, Wilmington, N. C.; and Walter Hildebrandt of F. W. Poe Mfg. Co., Greenville, S. C.



New classes will be started at the North Carolina Vocational Textile School, Belmont, N. C., July 1, on the morning shift, 8:20 a. m. to 1 p. m. The next classes on the afternoon shift, 3 to 6:30 p. m., will start Sept. 1.

New Sanforizing Machine Is Announced

Development of a new high-speed, rubber belt compressive shrinkage machine, which for the first time makes it possible to turn out a wide range of Sanforized cotton fabrics with a consistently smooth finish on both sides, has been announced by Robert M. Dowling, vice-president of Cluett, Peabody & Co., New York City.

Fabrics processed on the new machine will carry the Sanforized trademark as long as they conform to Cluett, Peabody's requirement that residual shrinkage after processing shall not exceed one per cent. Developed by Cluett, Peabody engineers and covered by patents and patents pending, the machines will be built by licensed machinery manufacturers in this and foreign countries.

"We consider that the development of a rubber belt compressive shrinkage machine that meets today's requirements of high speed and high volume production with a minimum of supervision and adjustment to be a major advancement in the controlled shrinking of cotton fabrics," said Mr. Dowling. "In the past any such machines required special time-consuming treatment of the fabrics before they were placed in the machine, were slow in operation, required frequent and extremely accurate adjustments by highly skilled operators and when used in plants where such operators were not available, the results were inconsistent, to say the least. We have recognized the need for such a machine for a number of years but also realized that we would have to develop one that would not be a bottleneck in a finishing plant's production or personnel."

A complete range of controlled shrinking equipment . . . including dampening and width control . . . is incorporated in the new machine. To obtain the necessary degree of shrinkage, it is necessary only to make the usual wash tests for determining potential shrinkage. Once this is established, the operator can set the machine for the amount of shrinkage required to meet the rigid standards for use of the Sanforized label.

Production speeds up to 100 yards a minute have been obtained when operating the machine on large lots. The yardage life of the rubber belt promises to be upwards of

four million yards, the current record of the belt on the first machine now running in production at Cluett's plant in Troy, N. Y. The rubber belt must be ground approximately every half-million yards to maintain the completely smooth surface that gives an equally smooth finish to the side of the fabric that comes in contact with it. For this grinding, a special grinder roll is supplied with the machine. Other than this grinding, which is done without removing the belt, the belt never needs to be changed, no matter the degree of shrinkage to be obtained, and therefore remains an integral part of the machine until it wears out.

In the design of the rubber belt machine, the compressibility of the thick solid rubber belt and the pressure it exerts when compressed, are taken advantage of to assure perfect contact between the belt and the fabric, and between the fabric and a steam-heated metal drum, without the necessity of heated metal shoes. The belt, carrying the fabric, is squeezed as it moves between a pressure roll and the metal drum. It is the resulting pressure that provides the perfect contact between the belt and the under surface of the fabric, and between the upper surface of the fabric and the smooth metal drum.

Dampening and heat are employed to make the yarns pliable. On the new rubber belt machine, after the rubber belt is squeezed between the pressure roll and the metal drum, the following recoil of the belt compresses lengthwise the damp, warm fabric in contact with it and compressively preshrinks it to whatever degree is necessary to make certain that residual shrinkage will not exceed one per cent.

'Nylon Technology,' New Book By Inderfurth

Nylon Technology, by Karl Inderfurth, is the first attempt by any author to gather independently the technical processing information concerning nylon. Wide in scope, the work runs the gamut of nylon manufacture from its development to the finishing of nylon fabrics. The book is one of the Textile Technology Series.

Karl Inderfurth is well qualified in the subject about which he writes, having had wide experience in the textile industry, especially with continuous-filament synthetic fibers. A graduate of the Clemson textile school, he worked with textiles while serving with the Army's Quartermaster Corp during World War II.

In the author's own words, *Nylon Technology* "presents, through data gathered from many sources, the methods employed to process nylon in the various segments of the textile industry." While some background in chemistry and the methods employed in textile manufacturing will be a great aid in the gleaning of the maximum information available in Mr. Inderfurth's work, the book is not intensely technical in nature. Certainly, it is written in language which the practical mill man will understand. According to C. W. Bendigo, consulting editor for the Textile Technology Series, the book can "serve as a reference point for all persons now engaged in manufacturing textile articles from nylon fiber or as a starting point for the technologists and mill men contemplating its use."

As an indication of what subjects are covered by Mr. Inderfurth's book, the following chapter titles are listed: The Development of Nylon; The Physical and Chemical Properties of Nylon Yarn; Spinning Nylon Staple on the

Cotton System; Spinning Nylon Staple on the Worsted System; Spinning Nylon Staple on the Woolen System; Preparation of Nylon Yarn by the Throwster; Warping, Beaming, and Slashing of Nylon Yarn; Quilling and Weaving of Nylon Yarn; Nylon Full-fashioned Hosiery Knitting; Knitting of Nylon Staple; Warp Knitting of Nylon Yarn; Nylon Tire-cord Processing; Nylon Sewing Thread; The Dyeing of Nylon; The Printing of Nylon; Finishing of Nylon Fabrics.

The work is published by McGraw-Hill Book Co. Inc., New York City.

Walter F. Fancourt Elected By Phi Psi

At the 50th anniversary convention of Phi Psi, honorary textile fraternity, held May 7-9 at the Penn Sheraton Hotel, Philadelphia, Walter F. Fancourt III was elected president. Mr. Fancourt, vice-president of W. F. Fancourt Co., 49-year-old chemical manufacturing firm founded by his father, succeeds M. Earl Heard, West Point (Ga.) Mfg. Co.

W. F. Fancourt III

John Wigington

Willard A. Colby, Emery Industries, Charlotte, N. C., was elected vice-president. He succeeds James L. Giblin, New Bedford (Mass.) Textile Institute. Mortimer T. Farley, Farley Harvey Co., Boston, remains as treasurer and John T. Wigington, American Cotton Manufacturers Institute, continues as executive secretary. Neither of these two incumbents were up for re-election this year.

Outgoing Vice-President James Giblin, and Mortimer Farley, treasurer, were both presented with plaques following an anniversary dinner on May 9 which closed the convention.

Guest speaker at the dinner was Dr. Lacona H. Hance, who takes office as president of the Institute of Textile Technology, Charlottesville, Va., this August. He discussed the "Front Lines of the Textile Industry," and outlined for student members of Phi Psi what they might expect

upon going into the business world. In citing an article in the November 1952 issue of *Fortune* magazine, Dr. Hance noted that there are more highly paid executives in textiles than in any other industry in the United States.

Presiding at the dinner was Mr. Fancourt and Edwin Michie of Andrew Y. Michie & Sons Co., Philadelphia, served as toastmaster.

Honorary degrees were presented to Bertrand Hayward, director of Philadelphia Textile Institute, and Harry Riemer, editor of *Daily News Record,* preceding the anniversary dinner. Both men spoke briefly at the dinner. Other speakers included John E. Fite Jr., Kroute & Fite Mfg. Co.; H. S. Regard, plant manager, Infants' Socks, Eufaula, Ala.; Dean Richard S. Cox, Philadelphia Textile Institute, and Arthur Thompson, Ciba Co., Charlotte, N. C. Horace T. Greenwood, president of Globe Dye Works, also scheduled to receive an honorary degree was unable to be present and it is expected that his degree will be presented during a Fall meeting of the Phi Psi.

At a luncheon meeting on the preceding day, some 200 delegates were addressed by Robert C. Jackson, executive vice-president of American Cotton Manufacturers Institute on the subject of tax laws, regulations and revisions. Mr. Jackson cited the textile industry's interest in revisions of present tax laws and regulations which would permit taxpayers to elect to depreciate newly-acquired productive equipment on the basis of its useful life as determined by them, within reasonable limits.

Mr. Wigington, the fraternity's executive secretary, announced that the 51st annual convention will be held Feb. 25-27, at The Carolina, Pinehurst, N. C.

N. C. Textile Foundation Re-elects Officers

W. J. Carter of Greensboro, N. C., a vice-president of J. P. Stevens & Co., was re-elected president of the North Carolina Textile Foundation Inc. at the organization's recent annual meeting at N. C. State College, Raleigh. Also re-elected were: Albert G. Myers of Textiles Inc., Gastonia, N. C., vice-president; William H. Ruffin of Erwin Mills, Durham, N. C., treasurer, David Clark, publisher of TEXTILE BULLETIN, Charlotte, N. C., secretary; and C. E. Baxter of Greensboro, assistant secretary-treasurer.

In an address to the group, Dean Malcom E. Campbell of the School of Textiles at N. C. State College, made known that J. Harold Lineberger of Acme Spinning Co., Belmont, N. C., had donated $25,000 to the foundation;

the foundation's chief purpose is to supplement state appropriations for the teaching research and extension work of the School of Textiles.

Dean Campbell also presented a proposal which, he said, would assure a continuing income to the foundation. The proposal calls for the contribution by all North Carolina textile mills of one cent a 100 pounds on the fiber they used. Dean Campbell said the state textile plants consume about 1.5 billion pounds of cotton and rayon annually. Based on this consumtion, the mills, he estimated, would donate, if all participated, approximately $150,000 a year.

Textile Leaders Address Management Group

Two prominent textile industry leaders were included among a distinguished list of speakers before the recent Southeastern Conference of the Society for the Advancement of Management at Asheville, N. C. Addressing sessions of the conference were H. K. Hallett of Charlotte, N. C., vice-president and general manager of Kendall Mills and newly-elected president of the American Cotton Manufacturers Institute, and Henry E. Ford, director of the development department of the Du Pont Co.

A single tax reform, which he said is long over-due, was strongly urged by Mr. Hallett as a means of permitting maximum economic stability and a smooth switch-over to peacetime production when the need arises. He said that the major roadblock is an "antiquated" policy applying to tax depreciation allowances on productive equipment. He asserted that bringing this "outmoded" system in keeping with technological progress would permit industry to modernize at a faster tempo, resulting in increased productivity, a higher standard of living and greater U. S. security through greater productive capacity.

Mr. Hallett told the conference that it is management's responsibility to demonstrate that America can prosper "not because of emergencies and military production, but in spite of these crises." He described as ruinous to the economy in the long run, any factor which discourages better productivity—the basis of America's higher standard of living—or which discourages the investment necessary for improved production.

Winning the understanding of the American people is 1953's challenge to business management, Mr. Ford declared. He said the change in national administrations has given managemet an opportunity—"perhaps the last"—to

"demonstrate that our system—individual initiative and competitive enterprise—can continue to provide better living for more people than any other system the world has devised."

But he cautioned that "it isn't enough just for management to operate a business at a profit." He said all business must be conducted so that "it cannot be subjected to justified criticism," and in addition, management must "win the people away from the false economics taught and advocated in the last 20 years."

Mr. Ford reminded his audience that during the depression the hunt for a scapegoat turned to business, and the managers became the targets. They were blamed for overproduction and under-production, for technological advancement and lack of technological advancement, for sinister planning and lack of foresight, Mr. Ford continued.

Business managers witnessed the growth of the "something for nothing" pholosophy with the result that "the time came when too many adults, and too few children, believed in Santa Claus." As this philosophy grew over succeeding years, coupled with the continuing attacks on the business system, "Socialism replaced prosperity as the figure waiting around the corner."

Whether it was mistrust of Socialism, a desire for change. or renewed proof that "you can't fool all of the people all of the time," there is now a federal administration "which is no longer hostile to American business," Mr. Ford said.

Cotton Standards Act Regulations Amended

The U. S. Department of Agriculture announced the amendment, effective May 15, of Cotton Standards Act regulations governing the availability and prices of practical forms of the revised cotton standards. The action follows a period of 20 days in which opportunity was given interested person to send written data, views, or arguments to the department regarding the proposed amendments to the department announced on March 20, 1953.

Practical forms of the revised cotton standards will include 12-sample official boxes and six-sample guide boxes of all grades of white and tinged cotton contained in the revised standards, excepting the grade good middling white and good middling tinged (which will be descriptive grades).

Revision of the grade standards of American upland cotton was announced by the department in August 1952, following public hearings and approval by cotton associations in nine cotton importing countries which are signa-

tories to the Universal Cotton Standards Agreements. These standards are known as Universal Standards for American Cotton. The revised standards go into effect Aug. 15, 1953.

The 12-sample boxes will cost domestic purchasers $10 per box f.o.b. Washington, D. C., and foreign purchasers $12 per box delivered. (Previously the cost was $5 a box domestic, and $6.25 foreign). The six-sample boxes will cost domestic purchasers $5 a box f.o.b. Washington, and foreign purchasers $6.50 a box delivered.

The department also announced a schedule of higher prices for the following named standards, to cover more nearly the cost of preparing and packaging these standards:

	Domestic purchase, f.o.b. Washington, D. C.	Foreign purchase, delivered
1. Standards for grade of American Egyptian cotton	$10 (previously $3)	$12 (previously $4)
2. Standards for grade of Sea Island cotton	$10 (previously $5)	$12 (previously $6.25)
3. Tentative standards for preparation of upland long-staple cotton	$ 5 (previously $3)	$6.50 (previously $4)
4. Standards for length of staple	$ 2 (previously $1)	$2.50 (previously $1.25)

Piedmont Colorists Outing Set June 12-13

The annual Summer outing of the Piedmont Section, American Association of Textile Chemists & Colorists, will be held June 12-13 at the Mayview Manor, Blowing Rock, N. C. J. W. Ivey of Moreland Chemical Co., Spartanburg, S. C., is in charge of arrangements for the event.

The registration desk will be open Friday afternoon, June 12, but no formal program has been planned for Friday evening. The entertainment program the following day will be featured by a golf tournament. Other events on the sports menu include horseshoe pitching, shuffle-board, ping pong and fly casting. The Tate Stables will be open for horse-back riding.

There will be a cocktail hour between 6:30 and 7:30 p. m. followed immediately by the banquet. Dress for the banquet will be informal. Following the banquet dancing will be enjoyed from 9 p. m. to 1 a. m.

Spinning Mills Test New Type Cotton

According to the National Cotton Council, an experimental cotton has been developed that promises much stronger yarns and fabrics, hope of cutting cotton waste at spinning mills and of combatting the problem of neps. Dr. Burt Johnson, fiber technologist for the council, emphasized, however, that the new variety, known as Hopi Acala, was strictly an experimental cotton. He said it never would reach commercial production because of low-yielding ability.

Nevertheless, he stated, Hopi Acala offered cause for optimism as commercial breeders already were at work developing varieties that would have much the same fiber properties as Hopi Acala, plus good yielding ability. Some of these new cottons may be available in the foreseeable future. Hopi Acala is a cross between a primitive Indian variety call Hopi and a modern variety called Acala. A medium-length cotton, it was developed at the U. S. Cotton Field Station at Shafter, Calif. By 1950, enough of the cotton was available to begin extensive tests to compare it with present varieties.

A summary of tests by 18 spinning mills and pilot plants has recently been completed. Under a wide range of spinning condition, in yarns varying in twist and number, Hopi Acala had an average of 29.3 per cent more yarn strength

than cottons used as controls. Its fiber tensile strength was 90,000 to 100,000 pounds a square inch, compared to a range of 80,000 to 90,000 pounds for the control cottons.

Hopi Acala did not exceed, and often was inferior to, the grades of the other cottons. But the appearance grades of its yarns always equalled or excelled those of the controls. This underlined the fact that the experimental cotton, because of the form and surface of its fiber, cleaned easily. Most mills reported a reduction in neps when spinning Hopi Acala. They also had less piecing of yarns because, regardless of yarn number and whether warp of filling, Hopi Acala had fewer ends-down than the other cottons.

The test cotton's high strength was transferred through the yarns to plied constructions and to various fabrics. And in finishing and dyeing, no matter what process was involved, Hopi Acala was fully equal to the controls. A fact of major importance brought out in the tests was that spinners, with standard methods already in use, can utilize improved cottons. But for certain uses and processes, some modification in spinning, twisting, and finishing probably will give even better results.

European Visitors Shown New Machinery

Keen interest in the American Textile Machinery Exhibition to be held next April 26-30 at Atlantic City was expressed May 13 by several leading English and European cotton manufacturers. Textile executives and raw cotton officials from the United States and ten foreign countries were in Washington attending the Universal Cotton Standards conference being held by the Department of Agriculture.

Interest of the manufacturers in the latest developments in modern textile machinery was whetted by a display arranged by the department in connection with the standards conference. The Europeans were particularly impressed with the new developments in opening equipment and fiber testing machines on display at the conference.

Paul Kuempers of Bremen, Germany, discussing the dearth of automatic looms in European textile production said he was particularly interested in the improvements in automatic machinery. George Hasty and Harry Scott Butterworth of the Federation of Master Cotton Spinners Association of Manchester, England, who plan to visit machinery manufacturers while in this country said there is a growing realization among all progressive cotton textile officials that they must modernize their plants in every way possible.

Among other visitors interested in machinery develop-

ments to be displayed next year at the Atlantic City textile machinery exhibition were D. H. Livesey of the Liverpool Cotton Association Ltd. and W. Robinson of the Manchester Cotton Association Ltd.

Interest in the exhibition and recent technological developments is expected to be increased among European manufacturers as a result of a series of conferences to be held in various countries next month by a ten-man committee of American cotton textile scientists and technologists. Plant modernization will be one of the principal themes stressed by this committee.

The Atlantic City exhibition is being sponsored by the American Textile Machinery Association of which Frederic W. Howe Jr., of Crompton & Knowles Loom Works, Worcester, Mass., is president.

Waste Processing Machine Is Patented

A patent for a machine designed to process textile mill waste back into usable fiber has been granted to Ira W. Dixon of Kirkman-Dixon Machine Co., Greenwood, S. C. The machine has been on the market for three years with patent pending and they are in use all over the country, Canada and many other foreign countries, including Formosa.

The single-cylinder K-D machine handles soft waste, slivers, rovings, etc., and the double-cylinder machine processes material already spun or twisted, but not sized.

J. H. Pangle, formerly with Kirkman-Dixon, had the first ideas for improving the existing waste machines, Mr. Dixon said. The two men worked together and applied for a patent, but Mr. Pangle moved to Charlotte, N. C. Mr. Dixon bought out Mr. Pangle's interest and finished the development of the machine on which the patent was granted.

The company makes 95 per cent of the machine in Greenwood, where it is assembled. The only parts made elsewhere are the beater teeth, the little spikes on the cylinder, the wooden slats for the aprons leading to the reed rolls and the roller chain.

Stress Need For Young Men In Industry

A five-point program to attract young men to the textile industry was outlined recently in Atlanta by Jack C. Werner of Werner Textile Consultants before the Georgia Section of the American Society for Quality Control. Pointing out the challenging opportunities which exist today for young men in the field of textiles, Mr. Werner emphasized that nevertheless the demand for trained personnel is far in excess of the available supply.

Lowell Textile Institute, for example, has 130 jobs available for just 98 members of its senior class, he said. Enrollment at the A. French Textile School at Georgia Tech is about 200, whereas the school could easily accommodate twice that number. A similar picture exists in the nation's other textile schools. There is abundant opportunity for advancement, security and good pay for trained men in textiles, he asserted.

"It is true," he added, "that the industry cannot pay fabulously high beginning salaries, because of its highly competitive nature and the great number of individually-owned mills. But it is equally true that it offers more than most careers, challenging opportunities for those with initiative, and the proper measure of ambition. There are any

number of young textile engineering graduates who earn $12,000 yearly as mill superintendents. There are a good number of still youthful mill executives who, because of personal ambition and complete devotion to their responsibilities, have risen within the span of several years to positions paying $30,000 a year and more.

"I think," he continued, "you will be hard put to show me another industry where the stakes are that high, and the opportunities that promising."

In addition to good pay, a recent survey has indicated that it requires less time for a trained man to get to the top in the textile field than it requires elsewhere, Mr. Werner said. Asserting that the textile industry now is on the verge of revolutionary changes, the speaker said: "They are the direct result of the tremendous research and development efforts undertaken by mills, individually and in groups, by colleges in collaboration and with the financial support of mills, by government and industry-sponsored research centers and laboratories. The record speaks for itself."

As the first point in his suggested five-point program, Mr. Werner listed "a broad educational program about the textile industry and the opportunities it offers."

A second objective, he suggested, should be a broadening of the educational curriculum for men preparing themselves for a career in textiles. "It seems imperative," he declared, "for schools to offer more courses in distribution, selling, general functioning of the textile trade, etc."

A third opportunity exists in tapping the graduate output of non-textile engineering and business schools, he continued. He said many graduates of business and other colleges and universities "could render a great service by going back to their alma mater and talking to students about textiles and its opportunities for managerial personnel."

Fourth, he said, there is a need to give encouragement to men with a broad general college education that there are opportunities in textiles. And, fifth, "There is a need for systematic approach toward instituting within-industry and within-mill executive training programs." He added: "A program to train deserving young men in the complex tasks of modern management would go a long way in attracting young men of promise to the industry."

Booklet Cites Opportunities In Textiles

Requests for textile school graduates during the past year amounted to ten times the number of such graduates available, according to Cleveland L. Adams, head of the School of Textile Technology at Alabama Polytechnic Institute. In a new booklet just published at Auburn, "Opportunities in Textiles," it is revealed that neither the need nor the demand for textile graduates has ever been greater than at present.

Officials of the Auburn Textile School point out in the booklet that textiles comprise the largest industry in Alabama with about 75 mills in 55 communities, nearly 55,000 employees and an annual aggregate payroll of about $160,000,000.

Emphasizing the wide selection of jobs in this industry, the booklet states that one large cotton mill listed 675 different jobs held by its various employees. It adds: "For

the college graduate, the greatest number of these jobs were supervisory jobs, production superintendent, plant manager, maintenance and service department heads, methods engineering, research and development, technical staff jobs, sales, purchasing, public relations and personnel."

The booklet also points out that the textile industry is a stable one, operating at a steadier rate than many others and that "particularly the textile graduates are assured of year-around work." The industry, it says, also is concerned with the health, security and general welfare of its employees and "it contributes heavily toward building schools, hospitals and religious institutions.

It adds that a recent magazine survey of the 900 top executives of the nation's 300 largest industries, railroads and utilities "showed that the textile executives reached the top quicker than in any other industry and that they remained in these jobs longer. The average pay level of textile executives is among the highest of any of the industries."

Large sums are being spent annually for modernization and research aimed at improving machinery and processes and developing new products to assure the continued prosperity of the industry, it is reported. The report asserts further: "Products of research and industry in the past decade alone indicate beyond a doubt that the textile industry is at the edge of a new era for which no precedent exists."

The Auburn School of Textile Technology offers three curricula to prepare students for all branches of the industry. The textile courses in these curricula are combined with courses offered by other departments of the college to provide basic instruction in the fundamental sciences, engineering, and technological subjects, and the humanistic social studies.

Copies of the booklet may be obtained from the School of Textile Technology, Textile Building, A.P.I., Auburn, Ala.

Cotton Faces Important Period Of Development

"The world's cotton industries are on the verge of a new and important period of development—a period in which the job of selling cotton products to individual consumers will be recognized and vigorously acted upon as a primary factor in industry, progress and welfare." This is the conclusion of Ed Lipscomb, Memphis, Tenn., director of sales promotion and public relations, National Cotton Council of America, after a series of discussions in the last several weeks with textile leaders of various West European countries.

He described to British trade association executives how these countries are going about setting up cotton textile promotion programs patterned along the lines of those carried out by the American cotton industry. The Cotton Council staff member spoke at a luncheon sponsored by the Dollar Export Council in London May 13.

"In Paris I saw representatives of seven West European nations, of which your own is substantially the largest in textile production, establish a permanent agency through which to assure frequent exchanges of information and discussion of plans among those who will be directly responsible for development of sales programs directed to their own domestic areas and export markets," he said.

"In every case those national programs are in their in-

fancy. Some, thus far, are not even born. Yet I think it safe to anticipate that within the next three to five years you and I will see the development of textile sales activity more intensive than any of us could have visualized even a year ago."

The speaker then explained how cotton industry leaders in the United States 14 years ago came together to organize the National Cotton Council of America with the goal of increasing consumption of American cotton, cottonseed and their products. These cotton leaders, he said, recognized that "if individual men and women did not buy cotton products, all the emergency programs in the world could not long sustain the industry, and that if they did demand and buy cotton products in sufficient volume, emergency programs would become unnecessary." They insisted also that "the greatest hope for cotton's future lay in a united effort on the part of all branches of the industry to build demand and desire for the finished products of fiber and seed at the retail counter."

The Cotton Council representative said the organization's program was concentrated upon the idea that to build markets cotton must meet its competition on three fronts: (1) the quality of the products it offered for sale, (2) the price at which it offered them, and (3) the sales pressure it put behind them. He then explained how the council staff was organized into program divisions to carry out these objectives, working in the fields of utilization research, production and marketing, and sales promotion.

Following a detailed summary of sales promotion activities in behalf of cotton, cottonseed and their products, he enumerated the gains for cotton over the period since founding of the council. Acknowledging that growth in population and trends in the national economy obviously have been factors in increased cotton consumption, he pointed out, on the other hand, that industry efforts provided impetus for a nationwide recognition of cotton's value.

"It is a demonstrable matter of general agreement among those most familiar with the U. S. cotton industry that the formation and development of a strong organization devoted wholly to the consumption of cotton products has been the center and mainspring of a tremendous upsurge of interest and activity in cotton promotion and cotton research all along the line from the breeder of cottonseed to the sales person at the retail counter.

"Certainly the total of that interest and activity has been by far the greatest contributor to the increased prestige and consumer preference which cotton products today enjoy in the United States."

New Chemstrand Booklet Features Acrilan

A colorfully illustrated booklet prepared by the sales department of the Chemstrand Corp. describes the characteristics and features of the firm's new acrylic fiber Acrilan, and illustrates by diagramatic flow chart the 14 basic steps involved in manufacturing this fiber—starting with natural gas and air. The booklet is to be distributed to the trade, retail stores and the consuming public.

Involving more than 11 years of research and development, Acrilan possesses properties of value to consumers of easy washing and quick drying; shrink, sag and stretch resistance; pleats and crease retention, and wrinkle and wilt resistance. The fiber also is mothproof, mildew-resistant, and not readily flammable. To the mills and manufacturers, the booklet states that Acrilan is easily processable on

existing equipment, possesses excellent dyeability, cuts and sews easily, and has good drapability.

This new booklet takes the place of "Acrilan, Created by Man" which was published in October 1951. Copies are available through Chemstrand's sales headquarters, 350 Fifth Avenue, New York 1, N. Y., or through the public relations department, Decatur, Ala.

Firm Cited For Outstanding Safety Record

For the third time in the past four years, the Cleveland, Ohio, plant of Industrial Rayon Corp. has received an Award of Merit from the National Safety Council for an outstanding safety record. The present award is in recognition of the plant's 1952 record when the accident frequency rate was reduced to an all-time low of 2.28 lost-time accidents of every million man-hours worked.

A highlight of the plant's 1952 safety accomplishments was the operation of more than 1,500,000 consecutive man-hours without a lost-time injury. The plant's safety record last year also earned it a first place award in the 22nd Annual Greater Cleveland Industrial Safety Campaign.

Conference Committee Personnel Named

Members of a ten-man committee of cotton textile scientists and technologists which will confer with representatives of the European textile industry on methods of improving the processing of American-grown cotton was announced May 11.

Chairman of the group will be M. Earl Heard of Shawmut, Ala., vice-president in charge of research of the West Point Mfg. Co., and other members are: J. Lindsey Dexter, Boston, Mass., assistant treasurer and cotton buyer for Pepperell Mfg. Co.; Alex Bell, Mount Holly, N. C., vice-president of American & Efird Mills Inc.; Walter Regnery, vice-president of Joanna (S. C.) Mills; Ralph Rusca, New Orleans, a member of the staff of the Department of Agriculture's Southern Regional Research Laboratory; William J. Martin, assistant chief, testing and marketing division, Department of Agriculture; Helmut Wakeham, director of cotton research project at the Textile Research Institute, Princeton, N. J.; Burt Johnson, Memphis, fiber technologist of the National Cotton Council; George S. Buck, Washington, technical director of the council; and Read P. Dunn Jr., director of the council's foreign trade division.

The series of conferences, developed jointly by the National Cotton Council, the American Cotton Manufacturers Institute and the Department of Agriculture, grew out of the International Textile Conference held last year at Buxton, England, at which plans were discussed for increasing world consumption of cotton by improving cotton textile products and stepping up productivity.

"We hope at this series of meetings, with European textile scientists, to explain the improvement in cotton fiber properties and the latest technical developments in this country which, if properly used, will strengthen cotton's competitive position and broaden its market outlets," Mr. Heard said. "This is the key to increasing the consumption of American cotton abroad.

"Basically, the series of research monferences is an extension to the international level of the policy of exchanging research information which has been followed so successfully in this country," Mr. Heard said. "A mutual exchange

of information will not only help world cotton consumption but it will also be beneficial to the textile industry itself. At the same time, we want our European friends to tell us how United States cotton could be further improved to meet the requirements of their spinners."

Meetings will be held at Manchester, England, June 11-12; Gothenburg, Sweden, June 15-16; Frankfurt, Germany, June 22-23; Zurich, Switzerland, June 25-26; and Paris, France, June 29-30.

TV Show Features Du Pont Camden Plant

The impact created by the establishment of a large industrial plant in a small Southern city—Camden, S. C.—was dramatized May 17 on the March of Time television show. The program was entitled "The New Industrial South—A Progress Report" and South Carolina's Gov. James F. Byrnes appeared on the program to point out some of the reasons for the change.

Camden in 1950 was a sleepy town of 5,000 which depended on cotton and tobacco for its dwindling income. Then Du Pont built an Orlon fiber plant there. Three years later, Camden is a bustling city of 8,000 with one citizen in four working at the new plant. Bank deposits have gone up two million dollars, the local hotel has expanded from 20 rooms to 60, a second newspaper has been established. More than 1,000 new homes have been built, as well as new stores, five new churches, a new Y.M.C.A. and a new high school for Negro students.

To show the impact of the change on the ordinary citizen, Time interviewed Cleatus Threatt, who was until three years ago a typical cotton and tobacco farmer struggling to keep solvent. Now a laboratory technician at the new plant, Mr. Threatt has quadrupled his income. He not only still has his farm, with a hired man to help him work it, but has added 100 acres and built a new home.

Bur-Mil Loan Fund Aiding Many Students

Among the 1953 crop of college graduates donning mortar boards his June will be a sizeable number who earned their degrees with assistance from the James Lee Love Educational Loan Fund. The educational fund was established in 1945 by the Burlington Mills Foundation for Burlington's employees and their children. Its purpose is to encourage scholastic interest in higher education by providing financial assistance. At present 160 students attending 66 different institutions in 11 states are taking advantage of aid offered by the loan plan.

The educational loan fund was named in honor of the late James Lee Love, eminent educator and one of the founders and original directors of Burlington Mills. In addition to giving financial help to students, it is designed to stimulate scholastic interest among young Burlington Mills employees and their children. In the seven years since its inception, it has made available more than $180,000 in loans to 285 students. No interest is charged on any loan, and the recipient is allowed an ample time after completing his education to make repayment.

The fund is administered through 50 local committees set up in communities where Burlington plants are located. These committees are composed of plant officials along with citizens of the community such as bankers, lawyers, ministers and school officials.

1952 Cotton Crop Shows Drop From 1951

The Department of Agriculture stated recently that reports from the nation's gins indicate that the 1952 cotton crop totaled 15,135,000 bales of 500 pounds gross weight. This total was 8,000 bales short of the 1951 crop but 3,361,000 greater than the ten-year average. The combined value of cotton and cottonseed was estimated at $3,047,261,000 or about eight per cent less than the 1951 value of $3,303,627,000.

The department reported that the 1952 cotton sold for an average of 34.6 cents a pound compared with 37.88 cents for the 1951 crop. The acreage in cultivation on July 1, 1952, was 29,922,000 acres or about 4.1 per cent less than the acreage in cultivation on July 1, 1951.

American Cotton Congress Set June 25-27

An address by Secretary of Agriculture Ezra Taft Benson will highlight the 1953 American Cotton Congress to be held June 25-27 at the Caprock Hotel in Lubbock, Tex. The theme selected for the congress is "Cotton's New Frontiers," and the keynote address will be delivered by Burris C. Jackson, general chairman of the congress.

Other speakers to be heard, and their topics, are: Wm. Rhea Blake, executive vice-president of the National Cotton Council, "New Developments in Research and Education;" Dr. Byron T. Shaw, agricultural research administrator, Department of Agriculture, "Opportunities in Farm Research;" Dr. M. K. Horne Jr., chief economist, National Cotton Council, "Trends in Cotton Consumption;" and Dr. L. H. Hance, executive vice-president and president-elect of the Institute of Textile Technology, Charlottesville, Va., will speak on an unannounced subject.

Spinners' Backlog Drops In April

Unfilled orders on the books of carded cotton sales yarn spinners showed a drop of 10.3 per cent at the end of April operations, the Textile Information Service reports.

As of May 2, spinners' backlogs amounted to 7.99 weeks' production and were 6.50 times the stocks on hand. On April 4, unfilled orders equalled 8.39 weeks' output and were 7.91 times stocks on hand. At the beginning of May a year ago, backlogs were equivalent to 8.34 weeks' production and were 4.97 times the stocks on hand.

Spinners' inventories showed a moderate increase for the month of April. Total yarn in stock, including yarn made for future deliveries against unfilled orders, amounted to 1.23 weeks' production on May 2. This compared with stock on April 4 equal to 1.06 weeks' production and with inventories at the end of April 1952 amounting to 1.675 weeks' output.

According to statistics of the Carded Yarn Association

covering reports from approximately 1.4 million member spindles, production in the week ended May 2 consisted of 31.6 per cent knitting yarn, 50.9 per cent weaving yarn, and 17.5 per cent all others.

Request Textile Division In Commerce Dept.

Top officials of the American Cotton Manufacturers Institute met May 12 with Commerce Secretary Sinclair Weeks to ask that a textile division be set up within his agency. A.C.M.I. officials also met with top aides of President Eisenhower to discuss foreign trade policy and emphasized that there should be no further impairment of present safeguards to domestic industry which are afforded by the American tariff structure.

Meeting with Secretary Weeks were H. K. Hallet, Charlote, N. C., A.C.M.I. president, who is vice-president and general manager of Kendall Mills; Harvey Moore, president of Brown Mfg. Co., Concord, N. C., an A.C.M.I. director and past-president of the organization; Robert C. Jackson, executive vice-president of A.C.M.I. and Dr. Claudius T. Murchison, A.C.M.I. economic advisor.

The proposed textile division, Secretary Weeks was told, should provide information and analysis of interest to the trade; should take an active interest and provide leadership with respect to legislative programs and administrative policies of the government which relate to textiles; and should hold periodic conferences with industry spokesmen.

The proposed textile division, as outlined by A.C.M.I. officials, would serve as a central reference agency for all published information of basic and general value to the industry. It would assemble and analyze world trade information relating to textiles and would provide an analysis of consular, commercial attache and trade commissioner reports as well as giving information on import and exchange restrictions and tariff developments of foreign countries. The division also might give information on the development of foreign industries competing with American textiles, reporting on the character of the new industries, the volume of the products and how they are distributed.

Mr. Hallett, Mr. Jackson and Halbert M. Jones, A.C.M.I. director and president of Waverly Mills, Laurinburg, N. C., met with Bernard M. Shanley, acting special counsel to the president, and Gabriel Hauge, administrative assistant on economic affairs. The textile leaders told the White House officials they favored a one-year extension of the Reciprocal Trade Agreements Act and felt the need for a full-scale study of measures aimed at achieving international economic stability and development of miltilateral trade.

SOUTHERN SOURCES OF SUPPLY for Equipment, Parts, Material, Service

Following are the addresses of Southern plants, warehouses, offices, and representatives of manufacturers of textile equipment and supplies who advertise regularly in TEXTILE BULLETIN. We realize that operating executives are frequently in urgent need of information, service, equipment, parts and materials, and believe this guide will prove of real value to our subscribers.

ABBOTT MACHINE CO., Wilton, N. H. Sou. Plant: Greenville, S. C., L. S. Ligon, Sou. Mgr.

ADAMS, INC., Taylorsville, N. C. S. J. Adams.

ALDRICH MACHINE WORKS, Greenwood, S. C. Carolina Reprs.: W. D. Wornall and B. Gales McClintock, Box 1524, Charlotte 1, N. C.; Georgia and Alabama Repr.: Ben R. Morris, Box 221, Brookhaven, Ga.; Repr. for Air Conditioning and Humidifying Equipment: J. E. Brown, Box 1318, Atlanta 1, Ga.

ALLEN BEAM CO., 156 River Rd., New Bedford, Mass. Sou. Repr.: Joseph Bowler, Jr., 107 McGee St., Tel. 3-3289, Greenville, S. C.

ALLEN WARPER CO., 40 Church St., Lowell, Mass. Sou. Repr.: Woodrow F. Tinsley, Route 5, Rosewood, Greenville, S. C.

AMERCOAT CORP., 4809 Firestone Blvd., South Gate, Calif. Carolinas Repr.: Southern Specialties Co., 202 Coddington Bldg., Charlotte 2, N. C.

AMERICAN ANILINE PRODUCTS, INC., 50 Union Square, New York 3, N. Y.: Works at Lock Haven, Pa.; Sou. Warehouse and Laboratory: 1500 Hutchison Ave., Charlotte, N. C.; Warehouse and Laboratory, 4001 Rossville Blvd., Chattanooga, Tenn. Sou. Reprs.: J. H. Orr, Mgr., Charlotte, N. C.; George R. Howard, Charlotte, N. C.; Gayle Rogers, Charlotte, N. C.; W. D. Livingston, Greensboro, N. C.; Marion West, Jr., High Point, N. C.; C. O. Starnes, Rome, Ga.; J. T. Bohannon, Jr., and R. W. Freeze, Chattanooga, Tenn.

AMERICAN MOISTENING CO., Providence, R. I. Sou. Plants, Charlotte, N. C. and Atlanta, Ga.

AMERICAN VISCOSE CORP., 350 Fifth Ave., New York City. Sou. Office, 221 S. Church St., Charlotte, N. C., Henry K. Kelly, Mgr.

ANHEUSER-BUSCH, INC., St. Louis, Mo. S. E. Sales Mgr. Corn Products Dept., Charles H. Conner, Jr., 607 Johnston Bldg., Charlotte 2, N. C.

ANTARA CHEMICAL DIV. GENERAL DYESTUFF CORP., 435 Hudson St., New York 14, N. Y.; 2459 Wilkinson Blvd., Charlotte, N. C.

ARMSTRONG CORK CO., 33 Norwood Place, Greenville, S. C. J. V. Ashley, Dist. Mgr., Tel. Greenville 3-5302.

ARNOLD, HOFFMAN & CO., INC., Providence, R. I. Sou. Office, 2130 N. Tryon St., Charlotte 1, N. C. Sou. Sales Mgr.: Dwight L. Turner, 2225 Colony Road, Charlotte, N. C. Salesmen: Willard L. Mills, 2213 Friendly Rd., Greensboro, N. C.; C. Jordan Dulin, 248 Tranquil Ave., Charlotte, N. C.; Philip L. Lavoie, care Clement Hotel, Opelika, Ala.; John H. Graham, P. O. Box 904, Greenville, S. C.; William F. Kennady, Lindmont Apts., Piedmont Rd. at Lindberg Dr., Atlanta, Ga.

ASHWORTH BROS., INC., Fall River, Mass. Sou. Sales and Service Office and Repair Shop, 1201 S. Graham St., Charlotte, N. C., J. M. Reed, Sou. Mgr., T. F. Hart, Sales; Mfg. Plant, Sales Office and Repair Shop, Laurens Rd., Greenville, S. C., A. E. Johnson, Jr., Mgr.; Sales Office and Repair Shop, 357 Forrest Ave., N. E., Atlanta, Ga., J. E. Seacord, Jr., Mgr.; Texas Repr.: Textile Supply Co., Dallas, Tex.

ATKINSON, HASERICK & CO., 211 Congress St., Boston, Mass. Sou. Office and Warehouse, 1639 W. Morehead St., Charlotte, N. C., Tel. 5-1640. Sou. Agt., F. E. Boseman.

ATLANTA BELTING CO., 508 Whitehall St., S.W., Atlanta, Ga.; Monticello Bobbin Co., Monticello, Ga.

BAHAN TEXTILE MACHINERY CO., Greenville, S. C.

BAHNSON CO., THE, 1001 S. Marshall St., Winston-Salem, N. C. Atlanta, Ga., 886 Drewery St., N. E.; Greenville, S. C., P. O. Box 1424.

BARBER-COLMAN CO., Rockford, Ill. Sou. Office, 14 Dunbar St., Greenville, S .C., Fred D. Taylor, Mgr.

BARKLEY MACHINE WORKS, Gastonia, N. C.

BARRELED SUNLIGHT PAINT CO., Providence, R. I. C. L. Park, Sou. Dist. Mgr., P. O. Box 446, Tucker, Ga.; Thomas C. Roggenkamp, 435 Wakefield Dr., Apt. B, Charlotte, N. C.; James E. Pentress, 135 Glyndea Rd., Jacksonville, Fla.; P. R. Singletary, 3382 Matheson Rd., N.E., Atlanta, Ga.; Thomas J. Edwards, Jr., 227 Pendleton St., Greenville, S. C., care Ross Builders Supplies, Inc.; Kenneth P. Patterson, 431 Bellview Dr., Falls Church, Va.

BEST & CO., EDWARD H., 222-224 Purchase St., Boston, Mass. Sou. Repr.: W. C. Hames, 185 Pinecrest Ave., Decatur, Ga., Phone Dearborn 5974; William J. Moore, P. O. Box 1970, Greenville, S. C., Phone Greenville 5-4820.

BIBERSTEIN, BOWLES & MEACHAM, INC., Charlotte 4, N. C.

BRADLEY FLYER & REPAIR CO., 1314 W. Second Ave., Gastonia, N. C.

BRIDGE SONS, JOHN, 9th and Pennell Sts., Chester, Pa. Sou. Repr.: George A. Howell, Jr., Rockingham, N. C.

BRYANT-DAVIS ELECTRIC CO., Greenville, S. C.

BRYANT ELECTRIC CO., High Point, N. C.

BRYANT ELECTRIC REPAIR CO., 607-9 E. Franklin Ave., Gastonia, N. C.

BRYANT SUPPLY CO., INC., 605 E. Franklin Ave., Gastonia, N .C.

BULLARD CLARK CO., THE, Charlotte, N. C., and Danielson, Conn. E. H. Jacobs Southern Division Plant, Warehouse and Office, Box 3096 South Blvd., Charlotte, N .C. Sou. Exec., Edward Jacobs Bullard, Pres., and C. W. Cain, V.-Pres. and Gen. Mgr., both of Charlotte, N. C. Sou. Service Engineers: S. B. Henderson, Box 133, Greer, S. C.; L. L. Froneberger, Jr., 523 Woodland Dr., Greensboro, N. C.; Ralph M. Briggs, Jr., 399 Lofton Rd., N.W., Atlanta, Ga.; Frank W. Beaver, Concord, N. C.; Bill Heacock, 315 Popular St., Sylacauga, Ala.; L. J. McCall, 536 Faris Rd., Greenville, S. C.

BURKART-SCHIER CHEMICAL CO., Chattanooga, Tenn. Plants: Chattanooga-Knoxville-Nashville. Sales and Service: C. A. Schier, A. S. Burkart, W. A. Bentel, W. J. Kelly, Jr., George S. McCarty, A. J. Kelly, J. A. Burkart, D. H. Gunther, T. A. Martin, E. F. Jurczak, Lawrence Newman, C. V. Day, care Burkart-Schier Chemical Co., Chattanooga, Tenn.; H. V. Wells, John T. Pigg, J. T. Hill, G. L. Vivrett, care Burkart-Schier Chemical Co., Nashville, Tenn.; Phil H. Swann, George Garner, L. W. Maddux, care Burkart-Schier Chemical Co., Knoxville, Tenn.; James A. Brittain, 3526 Cliff Road, Birmingham, Ala.; O. G. Edwards, P. O. Box 1181, Tryon, N. C.

BUTTERWORTH & SONS CO., H. W., Bethayres, Pa. Sou. Office: 1211 Johnston Bldg., Charlotte, N. C.

CALGON, INC., 323 Fourth Ave., Pittsburgh, Pa. Sou. Offices: J. W. Eshelman & Co., Inc., 2625 Sixth Ave., South Birmingham 5, Ala.; J. W. Eshelman & Co., Inc., 314 Wilder Bldg., Charlotte 2, N. C.

CAROLINA LOOM REED CO., 1000 S. Elm St., Greensboro, N. C.

CAROLINA REFRACTORIES CO., Hartsville, S. C.

CARTER TRAVELER CO., Gastonia, N. C., Division of A. B. Carter, Inc., Gastonia, N. C. Texas Repr.: R. D. Hughes Sales Co., 1812 Main St., Dallas, Tex.

CHAPMAN ELECTRIC NEUTRALIZER CO., Portland 6, Maine. Sou. Repr.: Louis P. Batson Co., Greenville, S. C.

CHARLOTTE CHEMICAL LABORATORIES, INC., Charlotte, N. C. Peter S. Gilchrist, Jr.

CHARLOTTE LEATHER BELTING CO., Charlotte, N. C. Mgr., J. L. Harkey; Sales Reprs.: P. L. Pindell, Charlotte, N. C.; Robert L. Swift, 33 Sevier St., Greenville, S. C.

CHEMICAL PROCESSING CO., P. O. Box 5186, Charlotte, N. C.

CIBA CO., INC., Greenwich and Morton Sts., New York City. Sou. Offices and Warehouse, 1517 Hutchison Ave., Charlotte, N. C.

CLINTON FOODS INC. (Corn Processing Div.), Clinton, Iowa. R. C. Rau, Gen. Sales Mgr., Southeastern Div., Clinton Foods, Inc., 161 Spring St. Bldg., Room 317, Atlanta 3, Ga., Tel. Walnut 8998; John C. Alderson, Asst. Mgr., Atlanta Office; Boyce L. Estes, Atlanta Office; Grady Gilbert, Box 342, Phone 3192 Concord, N. C.; J. Frank Rogers and E. F. Patterson, 900 Woodside Bldg., Greenville, S. C., Phone 2-8022. Stocks carried at Carolina Transfer & Storage Co., Charlotte, N. C.; Forrest Abbott Co., 117 E. Court St., Greenville, S. C.; Atlanta Service Warehouse, Atlanta, Ga.; Industrial Chemicals, Roanoke Rapids, N. C.

COCKER MACHINE & FOUNDRY CO., Gastonia, N. C., D. L. Friday, V.-Pres. and Gen. Mgr.

COLE MFG. CO., R. D., Newnan, Ga.

COLEMAN CO., INC., Greenville, S. C.

CORN PRODUCTS SALES CO., 17 Battery Place, New York City. Corn Products Sales Co., Southeastern Bldg., Greensboro, N .C., W. Rouse Joyner, Mgr.; Corn Products Sales Co., Woodside Bldg., Greenville, S. C., J. Alden Simpson, Mgr.; Corn Products Sales Co., Hurt Bldg., Atlanta, Ga.; W. H. Adcock, Mgr.; Corn Products Sales Co., Dermon Bldg., Memphis, Tenn., F. C. Hassman, Mgr.

CRABB & CO., WM., Black Mountain, N. C.

CREASMAN STEEL ROLLER MACHINE CO., INC., Box 153, Gastonia, N. C.

CROMPTON & KNOWLES LOOM WORKS, Worcester, Mass. Sou. Offices and Plant: 1505 Hutchison Ave., Charlotte, N. C. John C. Irvin, Sou. Mgr.

CROMPTON-RICHMOND CO., INC., Factors, 1071 Sixth Ave., at 41st St., New York 18, N .Y., Tel. Chickering 4-4210. Subsidiary of Crompton Co., Crompton, R. I.

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Charlotte 5, N. C. F. A. Miller, Jr.; 1331 Dragon St., Dallas 2, Tex., E. K. Anderson, Mgr.; 2415 San Jacinto St., Houston 4, Tex., P. G. Green, Mgr.; 508 N. Main St., Midland, Tex., T. D. Sevar; 833 Howard Ave., New Orleans 12, La., P. C. Hutchinson, Mgr.; 625 Park Lake Ave., Orlando, Fla., W. T. Roundy.

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DOLGE CO., THE C. B., Westport, Conn. Sou. Reprs.: L. G. Strickland, R. F. D. 4, Durham, N. C.; George E. Bush, 2404 Belvedere Ave., Charlotte 2, N. C. New England: John H. Barlow, 43 Potters Ave., Providence, R. I.

DRAPER CORP., Hopedale, Mass. Rhode Island Warp Stop Equipment Branch, Pawtucket, R. I. Sou. Office and Warehouses, Spartanburg, S. C., W. M. Mitchell and Donald Marshall; Atlanta, Ga., 242 Forsyth St., S.W., A. Wilton Kilgore.

DRONSFIELD BROS., Oldham, England; Box 35, Gastonia, N. C.

DU PONT DE NEMOURS & CO., INC., E. I., Electrochemicals Dept., Main Office: Wilmington, Del.; Sou. Dist. Office: 427 W. Fourth St., Charlotte 1, N. C.; LeRoy Kennette, Charlotte Dist. Mgr.; J. L. Moore, Salesman and Technical Service Mgr. Peroxygen Products Div.; C. W. Rougeux, Salesman, all located at Charlotte address. O. S. McCullers, Sales and Service Repr., 315 E. Faris Rd., Greenville, S. C.; N. P. Arnold, Sales and Service Repr., 2386 Alston Dr., S.E., Atlanta, Ga.; T M. Harris, Sales and Service Repr., 3630 Peachtree Rd., N.E., Atlanta, Ga.; R. S. Seidel, Sales and Service Repr., 1538 Shoup Court, Apt. 1, Decatur, Ga.

DU PONT DE NEMOURS & CO., E. I., Organic Chemicals Dept., Main Office, Wilmington, Del. Sou. District Office: 427 W. Fourth St., Charlotte 2, N. C. R. D. Sloan, Mgr.; J. D. Sandridge, Asst. Mgr.; J. V. Killheiffer, Laboratory Mgr.; W. I. Pickens, Sales Correspondent. Salesmen: L. N. Brown, H. B. Constable, H. H. Field, M. D. Haney, Jr. Technical Demonstrators: J. J. Barnhardt, Jr., Dr. I. F. Chambers, J. T. Hasty, Jr., W. R. Ivey, G. R. Turner, H. F. Rhoads, F. B. Woodworth, N. R. Vieira. The address for all of the above gentlemen is: E. I. du Pont de Nemours & Co., Inc., P. O. Box 1909, Charlotte, N. C. Salesmen: T. R. Johnson, P. O Box 876, Greenville, S. C.; J. A. Kidd, 1014 Rotary Drive, High Point, N .C.; J. T. McGregor, Jr., P. O. Box 1080, Greensboro, N. C. Atlanta Office: 1261 Spring St., N.W., Phone Emerson 5391, A. B. Owens, Dist. Mgr.; W. F. Crayton, Asst. Dist. Mgr.; R. H. Lewis, Office Mgr.; L. A. Burroughs, Lab. Mgr.; W. G. Rogers, Asst. Lab. Mgr. Sales Reprs.: Adam Fisher, Jr., R. L. Stephens, P. Park White. Technical Reprs.: J. H. Stradley, J. W. Billingsley, M. S. Williams, Jr., J. A. Darsey, F. P. Zirm. The address of all the above gentlemen is E. I. du Pont de Nemours & Co., Inc., P. O. Box 7265, Sta. C, Atlanta, Ga. Salesmen: A. R. Williams, 1 Belvoir Circle, Chattanooga, Tenn.; M. S. Morrison, Jr., 4222 Holloway Dr., Knoxville, Tenn.; J. A. Verhage, 3155 Given Ave., Memphis, Tenn.; A. W. Picken, P. O. Box 1058, Columbus, Ga.

EATON & BELL, 904 Johnston Bldg., Charlotte, N. C.; 753 Munsey Bldg., Washington, D. C.

ELECTRIC FURNACE CO., P. O. Box 8282, Charlotte 1, N. C. Repr.: J. S. Livingstone.

EMMONS LOOM HARNESS CO., Lawrence, Mass. Sou. Plant, 2437 Lucena St., Charlotte, N. C., George A. Field, Mgr.; Arthur W. Harris, Harris Mfg. Co., 443 Stonewall St., S.W., Atlanta, Ga.; W. H. Gibson, 1743 McKinley Ave., San Antonio, Tex.; R. F. "Dick" Coe, P. O. Box 221, Greensboro, N. C.; R. T. "Dick" Osteen, 11 Perry Rd., Greenville, S. C., Phone 2-6941.

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EXCEL TEXTILE SUPPLY CO., Lincolnton, N. C. Reprs.: N. W. Euray, Lincolnton, N. C.; Paul Euray, Lincolnton, N. C.; Industrial Suppliers, Inc., LaGrange, Ga.; Fall River Mill Supply Co., Fall River, Mass.; Theodore Huston, 2601 N. Broad St., Philadelphia, Pa.

FERGUSON GEAR CO., Gastonia, N. C.

FORBES CO., WALTER T., Chattanooga, Tenn.

FOSTER MACHINE CO., Westfield, Mass. Sou. Offices, 509 Johnston Bldg., Charlotte, N. C.

GASTON COUNTY DYEING MACHINE CO., Stanley, N. C.

GASTONIA BRUSH CO., Gastonia, N. C.

GASTONIA MILL SUPPLY CO., Gastonia, N. C.

GASTONIA TEXTILE SHEET METAL WORKS, INC., Gastonia, N. C.

GENERAL DYESTUFF CORP., 435 Hudson St., New York City. Sou. Office and Warehouse, 2459 Wilkinson Blvd., Charlotte, N. C., S. H. Williams, Mgr.

GOSSETT MACHINE WORKS, W. Franklin Ave., Gastonia, N. C.

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VICTOR RING TRAVELER CO., Providence, R. I., with Sou. Office and Sales Room at 358-364 W. Main Ave., P. O. Box 842, Gastonia, N. C. Phone 247. Also W. L. Hudson, Box 1313, Columbus, Ga.

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WATSON & DESMOND, 301½ W. Fourth St., Charlotte 1, N. C. Repr.: John Wyatt, P. O. Box 701, Greensboro, N. C.; R. V. McPhail, 709 S. Jackson St., Gastonia, N. C.; A. J. Bahan and M. R. Woods, P. O. Drawer 779, Greenville, S. C.; Edgar A. Ball (Chemical Dept.), Charlotte, N. C.; H. K. Smith, P. O. Box 472, West Point, Ga.

WATSON-WILLIAMS MFG. CO., Millbury, Mass. Sou. Reprs.: John Wyatt, P. O. Box 701, Greensboro, N. C.; Arthur J. Bahan, P. O. Box Drawer 779, Greenville, S. C.

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WESTVACO CHEMICAL DIV., 161 E. 42nd St., New York 17, N. Y. (Food Machinery & Chemical Corp.) Sou. Dist. Office: 1207 Liberty Life Bldg., Charlotte, N. C., Bishop F. Smith, Jr., Dist. Sales Mgr. Sales Reprs.: W. M. Clark, Charlotte, N. C.; Howard J. Helms, Jr., 508 Stratford Road, Avondale Estates, Ga.

WHITEHEAD ENGINEERING CO., 522 W. Peachtree St., N.W., Atlanta, Ga.

WHITIN MACHINE WORKS, Whitinsville, Mass. Sou. Office, Whitin Machine Works Office and Plant, Dowd Road, Charlotte, N. C., R. I. Dalton, V.-Pres. and Sou. Agt.; Charlotte Repair Shop, Z. C. Childers, Sales Mgr.; Atlanta, Ga., Office, 1015 Healey Bldg., B. B. Peacock, Sou. Agt.; Spartanburg, S. C., 724 Montgomery Bldg., R. W. Dunn, Sou. Agt.

WHITINSVILLE SPINNING RING CO., Whitinsville, Mass. Sou. Repr.: William E. Shirley, 11 Wyuka St., Greenville, S. C.

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Index to Advertising

Before Closing Down

– TEXTILE INDUSTRY HAPPENINGS AS THIS ISSUE WENT TO PRESS –

PERSONAL NEWS

Mr. King

W. Harry King has been appointed by I P A Southern Inc. as manager of its Southern operations. I P A Southern Inc. is an affiliate of Industrial Products of America, Paterson, N. J., dealer in dyeing, finishing and printing machinery. Mr. King is a graduate of Clemson (S. C.) College in textile engineering. He will make his headquarters at 610 S. C. National Bank Building, Greenville, S. C.

Henry Van Brederode, a vice-president of Celanese Corp. of America, has been named special assistant to K. C. Loughlin, vice-president and general manager of the Celanese textile division. . . . Three promotions in the Celanese Southern division, Charlotte, N. C., follow: W. D. Clark Jr. was named sales manager for filament yarn of the textile division. Formerly sales manager for the Southern district, Mr. Clark succeeds E. W. Best, who has been made responsible for sales activities of the company's foreign affiliates. A. Carl Martin Jr. has been promoted to special assistant to Mr. Clark and Richard M. Salisbury has been promoted to sales manager for the Southern district in the textile division.

Mr. Halstead

William G. Halstead has joined the sales staff of Ashworth Bros. Inc., manufacturer of card clothing, and will cover part of South Carolina for the company from headquarters in Greenville, S. C. A native of North Carolina, Mr. Halstead is a graduate of N. C. State College with a B.S. in textiles Before joining Ashworth he was associated with Dan River Mills, Danville, Va., in the carding and spinning department.

N. F. Young, a recent graduate from the Institute of Textile Technology, Charlottesville, Va., has become associated with Fieldcrest Mills, Spray, N. C., as a special projects engineer in the research and quality control department. A native of Indiana, Mr. Young also is a graduate of Wabash College. . . . Derrek S. Archer has joined Fildcrest as master mechanic for the finishing mill and bleachery. A native of Georgia, Mr. Archer studied mechanical and civil engineering at Georgia Tech. His previous associations include Whitin Machine Works, Whitinsville, Mass., Tubize Chattillion Co. (now merged with Celanese Corp. of America), at Rome, Ga., and more recently he operated his own business in structural, piping and maintenance work for mills and other industries in the Rome area.

Paul C. Beatty, formerly manager of the Halifax, Va., plant of Pacific Mills, has been named assistant Southern manager of the firm's worsted division. He will assist in supervision of Pacific plants at Brookneal, Drake's Branch and Halifax, Va., and Carrboro, N. C. . . . George W. Smith, formerly associated with Arlington Mills and Botany Mills, has been named resident manager at Halifax, succeeding Mr. Beatty.

William Croxton, until recently superintendent of Sheraton Mills Corp. at Cornelius, N. C., is now a member of the supervisory management organization of Robbins Mills.

E. J. Gernt is resigning June 1 as general manager of the Schwarzenbach-Huber Co. plants at Luray and Front Royal, Va. Mr. Gernt has been manager of the Luray plant the past ten years, and the past two years also has directed the Front Royal weaving plant.

J. M. Dove has been promoted from assistant superintendent of the Belton, S. C., plant of Abney Mills to superintendent of Abney's Grendel Plant at Greenwood, S. C. Mr. Dove was employed at Abney's Anderson, S. C., plant from 1937 to 1951 before being transferred to Belton. . . . J. A. Boyce has been promoted from assistant superintendent to superintendent of Abney's Panola Plant at Greenwood, succeeding A. L. Bannister, retired. Before transferring to Panola in February 1952 he had been in the quality control and standards department at Anderson.

Joe Mattox, formerly with Jackson Mills, Iva, S. C., has become associated with Borden Mills, Kingsport, Tenn., as superintendent of carding, succeeding T. G. Stroud. . . . Norman Beakes, a graduate of Clemson (S. C.) College with a degree in textile engineering, has joined Borden as superintendent of the inspection department.

Randolph Boaze has joined Mooresville (N. C.) Mills as superintendent of carding and spinning, a new post created in a move to co-ordinate certain phases of plant manufacturing. Before joining Mooresville Mills, Mr. Boaze was plant manager of Sellers Mfg. Co., Saxapahaw, N. C. He also was for a number of years associated with Dan River Mills, Danville, Va. In his new post he will be in charge of all operations in Mooresville's No. 3, No. 4 and No. 6 plants.

W. O. Reed has resigned as supervisor of carding at Peck Mfg. Co., Warrenton, N. C., to become overseer of spinning, spooling and warping for Consolidated Textile Co. Inc. at Martinsville, Va., effective June 1.

OBITUARIES

Donald W. Bridgman, 67, vice-president and director of Foster Machine Co., Westfield, Mass., died May 19 after a long illness. His funeral was held May 22 at Westfield. Mr. Bridgman was associated with Foster Machine Co. for 34 years, starting in 1919 as a shop employee, later transferring to the sales department and eventually becoming a vice-president and director. He was a member of the Foster 25-Year Club, the executive committee of the Associated Industries of Massachusetts, a director of the Hampton National Bank & Trust Co. of Westfield, a trustee of Woronoco Savings Bank of Westfield, and a trustee of Westfield Athenaeum. He is survived by a son, Edward Fowler Bridgman.

David Y. Cooper, 72, vice-president and director of Henderson Cotton Mills and Harriet Cotton Mills, Henderson, N. C., died May 13. Both firms were founded by his father, the late D. Y. Cooper. Surviving are his wife, a son, a brother and a sister.

John O. Edwards, 69, of Huntersville, N. C., a sales representative for Southern Spindle & Flyer Co., died May 18 at his home. He is survived by his wife, a son, a daughter and four brothers.

Karl G. Hudson, 64, president and treasurer of Pilot Mills Co., Raleigh, N. C., died May 18 at his home in Raleigh. Surviving are his wife, two daughters and a son.

Perley S. Wilcox, 78, chairman of the board of Tennessee Eastman Corp., died May 17 at his home in Rochester, N. Y. Mr. Wilcox also was board chairman of Texas Eastman Co. and former chairman of Eastman Kodak Co. He joined Tennessee Eastman in 1920 and became president in 1933. The first important development of acetate staple was made by Eastman under his regime. Mr. Wilcox is survived by his wife.

Dewey A. Williams, 43, proprietor and president of Williams Banding Co., Monroe, N. C., died May 15. Mr. Williams is survived by his wife, three sons, two daughters and a brother.

MILL NEWS

DURHAM, N. C.—Erwin Mills Inc. recently turned all its non-manufacturing property in Durham over to a realty firm for possible disposition. The property is valued at about $2,000,000. The properties include 272 company-owned dwellings, Erwin Auditorium and Erwin Field, an athletic field.

GREENWOOD, S. C. — Abney Mills has made offers to stockholders of Erwin Mills Inc., Durham, N. C., to buy part or all of their stock. Erwin operates plants at Durham, Erwin, Cooleemee and Neuse, N. C.,

and Stonewall, Miss., employing about 6,500 persons in the manufacture of sheets, pillowcases, work clothing, sports denim and allied lines. Abney operates nine plants in South Carolina, employing about 7,500 workers. F. E. Grier, Abney president, stated that should his firm acquire a sizable interest in Erwin the two companies will continue to be operated separately.

GREENVILLE, S. C. — Construction has been started on a new warehouse at Union Bleachery. The structure, which is of bowstring roof type, will have 14,000 square feet of floor space. An additional shed roof with 4,700 square feet of floor space will give a total of 18,700 square feet of floor space when it is completed.

LAURINRURG, N. C.—Dixiana Mills Inc. has received a state charter "to deal in textiles," with authorized capital stock of $500,000. Stock has been subscribed to by Halbert M. Jones, Edwin Morgan and Jennings G. King, all of Laurinburg.

DALTON, GA.—Alexander Smith Inc. has made arrangements to use the carpet-making facilities of Barwick Mill in Dalton to produce Smith's cotton broadloom line. Barwick Mills has recently completed a new carpet mill in Lafayette, Ga., where the company has concentrated its carpet production, thus having available productive equipment in Dalton sufficient for the needs of Alexander Smith. Alexander Smith will introduce its new line of cottons on June 1, the date on which the company's selling agreement with C. H. Masland & Sons terminates. The line includes two cut-pile and one loop-pile cotton fabrics, each in a range of 20 high-style colors. Also included is a luxurious, deep-pile, 100 per cent rayon fabric produced in 14 different colors.

SEVIER, N. C.—Dedication of American Thread Co.'s new finishing plant at Sevier is planned for June 30. Operations have been building up gradually, but steadily, and the plant is now operating at 75 per cent of capacity. It is expected that full capacity will be reached within a month, according to Harvey Eastman, manager of the Sevier plant. One of the most modern thread and yarn finshing plants in the world, the Sevier plant was designed and built in consultation with leading textile engineering specialists. Located on a 250-acre tract abutted by the Blue Ridge Mountains, the 500,000 square-foot building is a single story, windowless brick structure of steel frame construction. The interior of the plant was designed to guarantee product quality and to provide maximum employee safety and comfort. Other features of the plant are a power sub-station, reservoir, and complete water treatment equipment. The site of the plant is 35 miles northeast of Asheville, N. C., and about half-way between Marion and Spruce Pine, N. C. The Atco plant is served by a new hard surfaced road and a railroad spur track, allowing materials and products to be shipped in and out by both rail and truck. Mr. Eastman also said that henceforth all warping operations of American Thread Co. will be handled at Sevier. This will substantially reduce handling and transportation and will allow precision control of warping.

SHELBYVILLE, TENN. — Ground will be broken this Summer for a major expansion of Shelbyville Mills, United States Rubber Co.'s textile mill in Shelbyville, which will give employment to approximately 200 additional people next year, it was announced by W. E. Clark, vice-president and general manager of the company's textile division. The expansion will be a one-story addition to the main mill building covering more than 67,000 square feet of floor space, Mr. Clark said. It will be of brick construction with large window areas for good lighting and ventilation. Production in the new structure probably will start early in 1954. This will be the second major expansion of the plant in the past two years. The proposed unit will be attached to the west side of the recent addition. Mr. Clark said that the new unit is necessary for the further production of goods now being made at Shelbyville Mills. The plant produces tire chafer fabric, tufting yarns and rayon tire cord.

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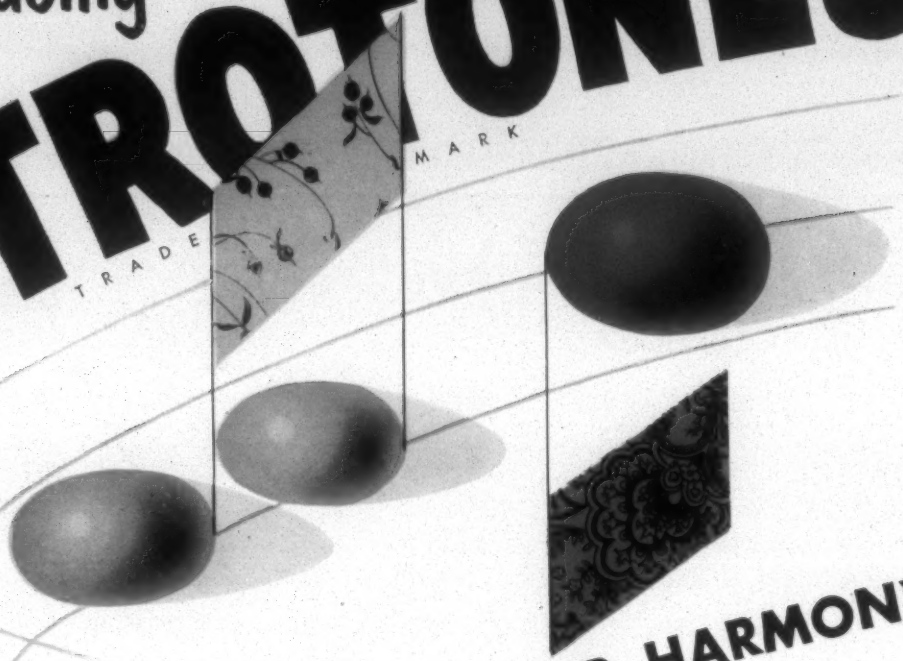

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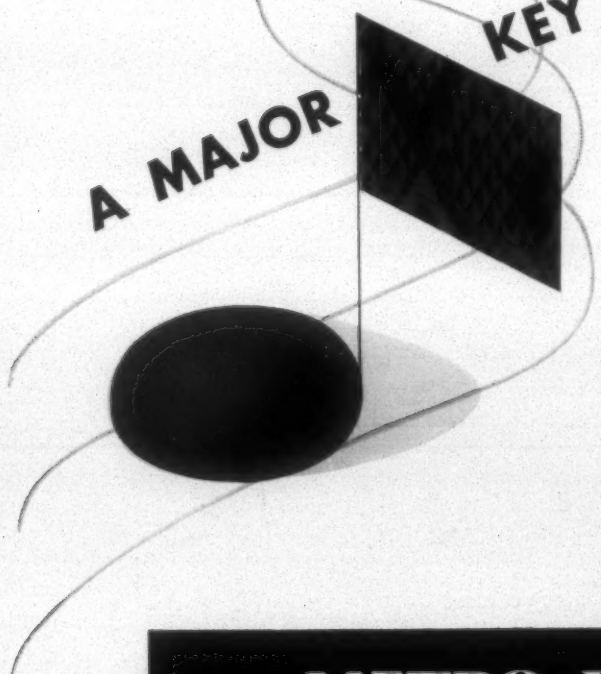

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